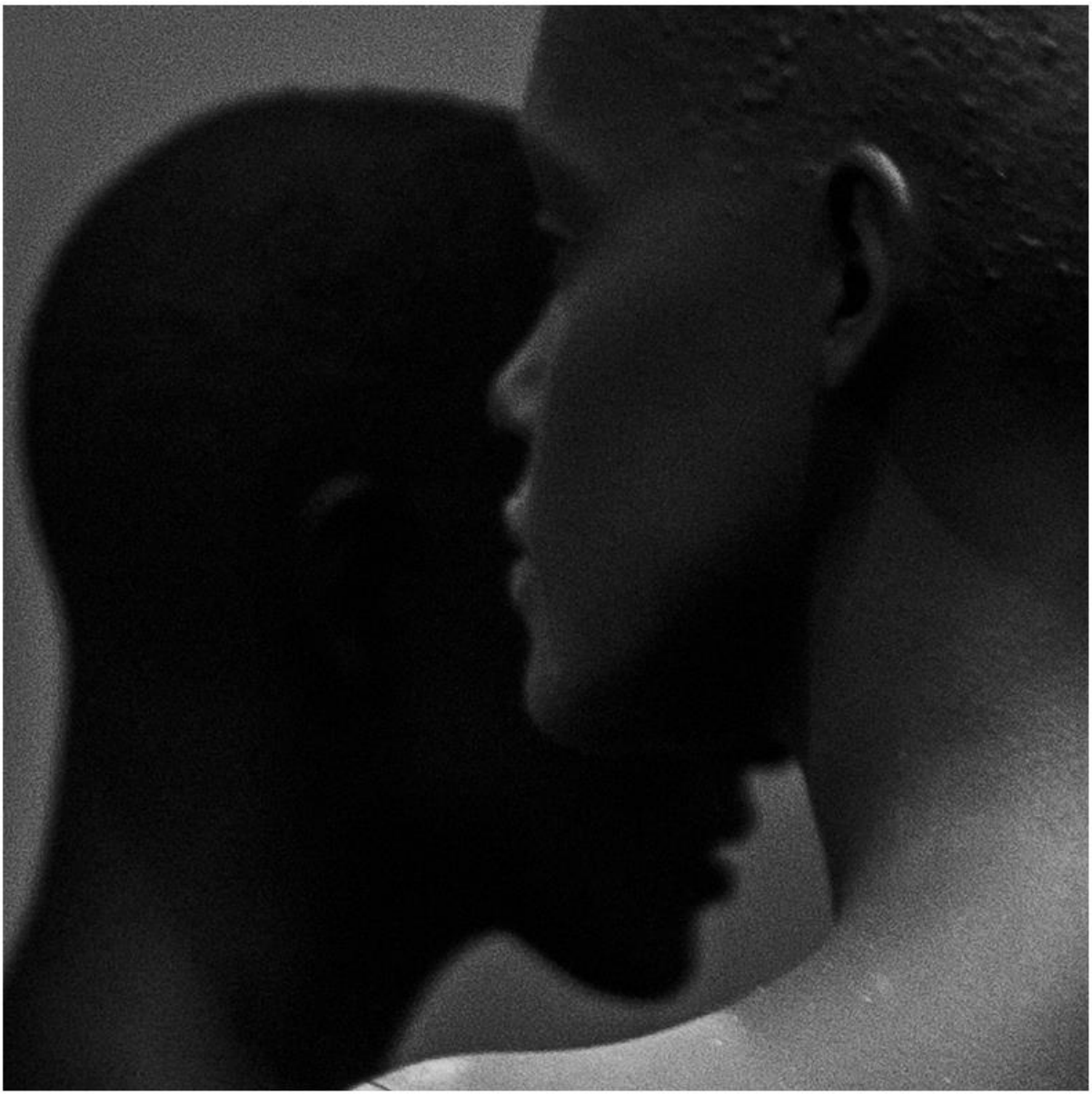

Explanatory models of mental health:
a qualitative study among East-African migrants and Belgian healthcare professionals

Thesis submitted for the degree of
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to be defended by

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Muhiba Botan - Habeen Madow, Foto 0.2

Muhiba Botan (she/her) is a multidisciplinary visual artist based in Antwerp. Currently undergoing (and enjoying) an evolution in her artistic practice and wandering in the space between being and becoming. Her current work is an exploration on the intersections between grief, time and reality, and on rituals of remembrance. www.mbotan.com

Summary

Research indicates a significant prevalence of mental health issues among migrants in Europe, because they are confronted with various risk factors throughout their migration journey. Despite these mental health challenges, migrants are underserved in mental healthcare services in the countries of destination due to, amongst other factors, their different understanding of mental health with the dominant healthcare system. Recognizing the influence of cultural differences on mental health perceptions is essential to enhance mental healthcare for migrants since it leads to variations in causal attributions, health-seeking behaviour, and treatment practices. Therefore, this dissertation seeks to explore the understanding of mental health among East-African migrants in Belgium, employing the anthropological concept of 'explanatory models'. Additionally, it examines how healthcare professionals perceive these explanatory models, including potential differences compared to their own views, as well as the impact of these perceptions on the professionals' healthcare practices. The study is based on in-depth interviews conducted with first-generation East-African migrants and healthcare professionals working with African communities.

Results show that the explanatory models of mental health significantly influence the healthcare-seeking behaviour of East-African migrants. This study reveals the influence of migration and integration processes on the potential change of these models over time: participants who become more familiar with the dominant view on mental health, tend to align their own understanding of mental health more closely with that view. Secondly, results illustrate that the practices of healthcare professionals are influenced by their own explanatory models and the disparities they encounter with the explanatory models of their migrant patients. In the study, a comparison was made between professionals with and without a similar migration background. The findings demonstrate that, to engage with and support East-African migrants effectively, healthcare professionals should gain an understanding of how these individuals perceive mental health.

These insights could form the basis for enhancing mental healthcare for migrants in Belgium, with a strong emphasis on considering both migrant and professional explanatory models. However, the study findings suggest that focusing solely on explanatory models in therapeutic interactions may not be sufficient to improve healthcare services. A holistic healthcare approach is necessary. This approach should involve investing in healthcare personnels' cultural diversity, the provision of culturally appropriate care, and an active involvement of cultural communities in the healthcare system. Beyond these adaptations of the healthcare system, the results show that enhancing the mental health of migrants also requires consideration of the broader socio-political and integration-related context. In this particular context, the underlying causes of mental health issues among migrants became apparent,

particularly within the Belgian reception and integration system. The findings show how the organization of this system increased structural social exclusion. For instance, the lengthy and uncertain process of obtaining residence status impedes the social integration of migrants. In light of the research findings and existing literature, this dissertation presents future research suggestions and concrete recommendations for policy and practice in addressing the multifaceted challenge of improving migrants' mental health.

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Inhoud

CHAPTER 1. RESEARCH RATIONALE, OBJECTIVES & OVERVIEW

This dissertation investigates the mental health understandings among East-African migrants in Belgium. It further examines how healthcare professionals in Belgian healthcare perceive these understandings, whether the professionals experience differences with their own understandings and how this influences their healthcare practices. This research underscores the relevance of considering people's mental health understandings and perceptions within mental healthcare. This chapter outlines the research rationale and objectives, discusses how the dissertation contributes to existing research, and clarifies the usage of key terms in this dissertation.

1.1 Research rationale

Migration, the movement of persons away from their place of usual residence (International Organization for Migration 2019), is a complex process that can have a profound influence on a person's mental health. Migrants often face a range of challenges during their migration trajectory, and have to deal with social health determinants in the different phases of migration (Davies, Basten, and Frattini 2009; Priebe, Giacco, and El-Nagib 2016). The prevalence of mental health problems among migrants living in Europe, is significantly higher than among the general population (Martin and Sashidharan 2023; Missinne and Bracke 2012; Patel et al. 2017). However, there exists a treatment gap, wherein migrants are underrepresented in mental healthcare services and experience disparities in accessing these services (Ceuterick et al. 2020; Lebano et al. 2020). This treatment gap might be the result of two dynamics. First, migrants adopt a different mental healthcare use than the general population due to a complex interplay of demographic, socio-economic, structural and logistical factors, as well as sociocultural factors (Fauk et al. 2022; Priebe et al. 2016). Second, the mental healthcare systems often fail to successfully include migrant patients (Matlin et al. 2018). Differences in how people perceive and conceptualize mental health among migrants and the dominant healthcare system are an important factor in this treatment gap (Fauk et al. 2021; Graetz et al. 2017), but are rarely studied (Mölsä, Hjelde, and Tiilikainen 2010). I situate my PhD within the idea that mental health is a social and culturally constructed concept: every culture has its conceptualization of mental health (Amuyunzu-Nyamongo 2013; McCann 2016). While acknowledging the inherent individual differences within this diverse migrant group, my dissertation primarily seeks to explore the presence of a shared narrative in the explanatory models of mental health among East-African migrants in Belgium.

The concept of '*explanatory models*', coined by the anthropologist and psychiatrist Arthur Kleinman and his colleagues (Kleinman, Eisenberg, and Good 1978), is used to explore the cultural relevance within mental health understanding. Explanatory models of an illness 'ascribe meanings to symptoms, evolve

causal attributions and express suitable expectations of treatment and related outcomes' (Dinos et al. 2017). I argue that it is essential to explore and comprehend the explanatory models among both migrant populations and (mental) healthcare professionals as they significantly influence the help-seeking behaviours and preferences for (mental) healthcare among migrants. The explanatory models of (mental) healthcare professionals and the institutions they work in, might be subject to biases and limitations that exclude and limit access for migrant patients. Understanding how explanatory models play a role is crucial to bridge the treatment gap and provide inclusive healthcare services for migrants.

Within my research, I focus on the explanatory models of mental health among East-African migrants living in Belgium, which is particularly relevant for several reasons. First, East-African migrants constitute a significant and growing proportion of the Belgian population (Demart et al. 2017), with a majority originating from countries with a Belgian colonial history, such as the Democratic Republic of Congo, Rwanda, and Burundi. I also included East-African countries with distinct histories and more recent migration to Belgium, such as Somalia, Eritrea, Ethiopia, Tanzania. The primary aim of my study is to explore potential differences and commonalities in explanatory models among East-African migrants. By including this diverse set of East-African countries, I can avoid biases that may arise from solely focusing on migrants coming from countries with a Belgian colonial history, considering their unique historical contexts, migration patterns, and relationships with Belgium. Second, evidence suggests that migrant groups of African descent are more frequently exposed to various forms of racism and discrimination (Centrum voor gelijkheid van kansen en voor racismebestrijding 2011; Demart et al. 2017; Tortelli et al. 2014). The combination of their challenging migration experiences and precarious living conditions in the destination countries renders them among the most vulnerable groups to developing mental health problems (Pannetier et al. 2017).

I also explore the perceptions of healthcare professionals working in Belgium. I aim to identify potential differences and similarities in the understanding of mental health, attitudes, and treatment approaches of healthcare professionals towards East-African migrants and how these impact their healthcare practices. Through a comparison between professionals with and without a similar migration background, I examine how professionals' own backgrounds and experiences potentially influence their perceptions regarding mental health among East-African migrants. It may be that East-African migrants' explanatory models differ significantly from the mainstream ideas prevalent in conventional Belgian (mental) healthcare, as studies focusing on mental health perceptions in East-African countries seem to imply (Amunga 2020; Amuyunzu-Nyamongo 2013; Teferra and Shibre 2012). Failure to consider these differences can result in the provision of inadequate or ineffective mental health services (Kleinman and Benson 2006). Professionals can improve their understandings and assessments when they explore and have knowledge on the patient's explanatory model (Bhui and Bhugra 2004). By examining and

exploring potential gaps and differences in explanatory models, it becomes possible to tailor mental health services towards the specific needs and preferences of the migrant population.

It is important to recognize a duality within this rationale: at one hand, I use terminology, as well as prevalence numbers of mental health problems among migrants, that are derived and diagnosed from a discourse on mental health as adopted mainly in the Global North. While this language and numbers are helpful to identify the scale of mental health problems among migrants and can inform policymakers, healthcare professionals and researchers about the importance and the extent of mental health problems among migrants, it might not do justice on how the target population defines and experiences mental health themselves. With my research on explanatory models, I aim to complement the existing research, and exactly expose that duality. Through my research, I aim to show how knowledge on diverse explanatory models can provide a deeper understanding on how a cultural context matters within mental health research and mental healthcare. This will allow for a better development of a culturally sensitive mental healthcare that is respectful of culturally diverse understandings (Dinos et al. 2017). By engaging with explanatory models in this research, the perspectives and experiences of migrant communities are valued and inclusivity is fostered.

1.2 Contributions to the field

With my PhD-research, I aim to make a meaningful contribution to the field of research and practice that focuses on the intersection of culture, migration and mental health in three main ways. While acknowledging the wealth of theories that could enrich the depth of my research, I made strategic choices to ensure a coherent theoretical foundation in my dissertation. Drawing on my educational background in psychiatric anthropology, I chose to apply the framework of 'explanatory models' (Kleinman, Eisenberg, and Good 1978). Using that framework holds particular relevance in the context of research on migration and mental health due to its emphasis on understanding the diverse ways individuals conceptualize and make sense of mental health. Explanatory models allow for a nuanced exploration of the unique cultural factors that shape individuals' perceptions of mental health. With my research, I contribute to the applicability and advancement of the theoretical model within the field. First, by exploring the explanatory models of East-African migrants, I provide valuable insights into their understanding of mental health: what do they consider as mental health issues and what are the causes, symptoms, and appropriate treatments for those issues. While similar research often focuses on the static explanatory models of people within a certain region, an innovative aspect of my research is to also take the dynamic nature of explanatory models into account, by exploring how the explanatory models of migrants are potentially influenced through their migration and integration trajectory. This knowledge helps to bridge the potential cultural gap between healthcare professionals and migrants,

which will contribute to the development of culturally sensitive and inclusive mental health services that effectively address the unique mental health needs of migrants in Belgium (Bhui and Bhugra 2004; Dinos et al. 2017). By recognizing the socio-cultural factors that shape individuals' decisions to seek or avoid mental healthcare, healthcare systems can develop strategies to improve access and utilization. For instance, if certain cultural beliefs contribute to stigma or mistrust towards formal mental health services, alternative approaches such as community-based or culturally sensitive interventions may be more effective in engaging this population (Marsella 2011; O'Mahony and Donnelly 2007).

Second, by exploring healthcare professionals' perceptions on the explanatory models of their patients with a sub-Saharan African background, I provide more insight in how these perceptions influence their treatment practices. The study results can help to identify gaps in knowledge and areas where training or education is needed. Through an innovative approach by comparing both professionals with and without a similar migration background, we can gain an understanding on how potential familiarity with explanatory models between professionals and patients can play a role in the provision of (mental) healthcare. In literature, it has been documented that patients are more satisfied when their healthcare professional shares their explanatory model then when they do not (Bhui and Bhugra 2004; Marsella 2011). Furthermore, the study results can expose potential limitations within and beyond the healthcare system, through the identification of potential barriers to effective accessibility, communication and treatment of migrant patients.

Third, this study aims to contribute to expand the understanding of how cultural factors shape mental health experiences and outcomes. The conventional approach to understanding cultural differences between migrant patients and health professionals in the mental health field often relies on a taken-for-granted definition of mental health and rarely explores the influence of cultural, religious, and other factors on mental problem explanations and healthcare practices (Mölsä, Hjelde, and Tiilikainen 2010). Additionally, these studies tend to overlook the possibility that understandings of mental problems may evolve due to the influence of experiences and differing contexts within the migrants' trajectories. By emphasizing the dynamic nature of explanatory models of mental health and their impact on both migrant mental healthcare behaviour and professional practices, my approach introduces an innovative perspective to the field of migrant mental health research. The results may not only benefit researchers but could also inform policymakers, healthcare professionals, and service providers, enabling them to make informed decisions and develop evidence-based practices that improve mental health outcomes for migrants.

With this research I aim to provide an explorative 'case-study' that sparks the interest to expand this research to other, understudied migrant populations in Belgium, and to investigate the migrant mental

healthcare approaches in Belgium further. In general, Belgium is lacking a strong, unified research tradition within the field of migration and mental health, in contrast to countries such as The Netherlands, the UK or Canada. Only in recent years, mental health and migration-related topics are studied by separate research groups as well as single researchers (such as myself), at different universities. For instance, at the KU Leuven the 'Center for Social and Cultural Psychology' studies social psychological and cultural psychological themes. At the University of Ghent, researchers within the CESSMIR network focus on the mental health among unaccompanied minors. As a consequence, the attention for migrant's mental health in the Belgian academic field is mainly characterized by a scattered focus on specific population groups or specific mental health problems. Research has focused on particularly Moroccan and Turkish migrants (e.g. Levecque, Lodewyckx, and Vranken 2007; Rondelez et al. 2018), who represent significant proportions of the migrant population in Belgium (Myria 2019). Another strand of research comprises studies in the HIV field, e.g. on coping strategies and mental well-being among the specific population group of sub-Saharan African migrants living with HIV (e.g. Arrey et al. 2016; Nöstlinger, Loos, and Verhoest 2015). The previously mentioned research on unaccompanied minors focuses on understanding the emotional and behavioural consequences experienced by migrant youth, particularly unaccompanied refugee youths (e.g. Derluyn, Mels, and Broekaert 2009; Vervliet et al. 2014). Important to note is that this research often applies an unquestioned understanding of mental health and only exceptionally considers the migrants' view on the concept of mental health (e.g. Rondelez et al. 2018).

Overall, my research may contribute to the existing body of research in enhancing the cultural sensitivity among healthcare professionals and policy makers, help to improve access to mental healthcare for migrants, and develop effective and inclusive healthcare interventions. I sincerely hope that my research allows for a more comprehensive understanding of the unique challenges and strengths of migrant populations, fostering a more inclusive and responsive mental healthcare system. Ultimately, the goal is to help reduce the treatment gap and ensure equitable access to qualitative mental healthcare for all migrants.

1.3 On terminology

Before setting out the background and findings of this dissertation, I aim to clarify how I use central terms within the context of this dissertation to avoid confusion among the readers.

1.3.1 East-African Migrants

First of all, I want to address the terminology used to describe the East-African migrant participants included in my research. In research with people with a migration background, it is crucial to

acknowledge and address the sensitivity of the wording employed. Profound discussions on what terms to use have preceded the writing of the articles and the text presented in this dissertation. According to the International Organization for Migration (IOM) glossary, migrants can be defined as '*people who move away from his or her place of usual residence, whether within a country or across an international border, temporarily or permanently, and for a variety of reasons*' (International Organization for Migration 2019). This definition by IOM includes individuals who are forcibly displaced due to conflict or persecution, as well as those who migrate voluntarily for economic, social, or political reasons (International Organization for Migration 2019; Kronick, Jarvis, and Kirmayer 2022). Because it is an umbrella term that comprises an extensive diversity of people with different migration stories, the term 'migrants' is used in various interpretations in literature (Kronick et al. 2022). Sometimes it also includes children of migrants (i.e. "second-generation migrants") or encompasses diverse legal and bureaucratically defined categories of migrants, who are defined differently in varying social contexts as well as countries of destination. There are multiple implicit risks in categorizing people into one group, as it can generalize, exoticize and overlook the diversity within a certain population, it can perpetuate stereotypes or reinforce biases. However, at the same time, in the context of migrant health research, categorizing diverse populations can be essential to identify and address health disparities and needs (Agyemang, Bhopal, and Bruijnzeels 2005; Bhopal and Donaldson 1998). It is therefore crucial that researchers describe their study populations in an accurate and appropriate manner (Bhopal and Donaldson 1998).

I have intended to make a thoughtful choice trying to ensure that the experiences of the population involved are accurately and respectfully represented. Following the recommendations described by Agyemang and colleagues (2005), I aimed to use the most specific term suitable to the purpose and context of my study, and give an extensive description on the population in the study. I also opted to use a term which does not impede the readability of the text. Therefore, I use the term 'East-African migrants' in the setting of this PhD, which refers to 'people with a first-generation East-African migration background'. These are people who moved from the East-African region, encompassing the two geopolitical regions of the East African Community (East African Community 2023) and the Horn of Africa (Brittanica 2023), to Belgium. This region includes the countries Burundi, Congo DR, Djibouti, Eritrea, Ethiopia, Kenya, Rwanda, Somalia, Tanzania and Uganda. It is important to recognize the diversity within this group, as it encompasses individuals from various countries, different ethnic backgrounds, and with diverse migration trajectories and experiences. While not everyone may identify as an East-African migrant, it serves as a delineation of groups and differentiation within the African continent, as well as a delineation of relevant migrant groups in Belgium. It is important to describe the commonalities within their narratives on how they understand and perceive mental health as this can

reveal important insights for the Belgian mental healthcare system. In my research, I aimed to capture if and how these understandings influence the East-African migrants' health behaviour and how their mental health understandings are perceived by healthcare professionals working in the Belgian healthcare context. I spoke with a diverse range of people having a first-generation East-African migration background, also in terms of gender, age, time of residency in Belgium. In that manner, I aimed to understand potential commonalities, as well as differences, in how East-African migrants perceive and understand 'mental health'.

1.3.2 Mental health

A second term central in my dissertation is 'mental health'. The World Health Organization (WHO), defines mental health as 'a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community' (World Health Organization (WHO) 2010). However, this definition has been contested to be influenced by the Global North perspective in which it has been defined (Galderisi et al. 2015). It can be questioned if a general consensus on the concept of mental health is even possible, as differences in values, cultures, and social backgrounds across countries can give a different interpretation to the concept. Moreover, 'mental health' has been described as a social and cultural construct, as different societies, groups, cultures, institutions and professions have diverse ways of conceptualising the nature and causes of mental health (Amuyunzu-Nyamongo 2013; Scheid and Brown 2010). The central idea in this dissertation is to indeed question the universality of the concept of 'mental health' and to explore what is understood with this term among the population of East-African migrants, living in Belgium. Therefore, I do not use a single definition of 'mental health', but I aim to describe throughout my dissertation how 'mental health' is interpreted by the research participants in different (cultural) context.

1.3.3 Culture

A third term that is often used throughout this dissertation, is the concept of 'culture'. 'Culture' as a term is broad and multifaceted, it has been debated and defined in different ways in history and across different fields, making it challenging to pinpoint an exact definition. In contemporary social science, understandings of 'culture' have shifted away from traditional definitions of culture as unique, homogeneous, and closed (Jeknić 2015). Culture is seen as a fluid and dynamic concept, subject to a hybrid and never completed process. It refers to 'the complex web of shared beliefs, values, customs, behaviours, and material goods that characterize a group or society and shape human behaviour' (Amuyunzu-Nyamongo 2013; Bhugra, Watson, and Wijesuriya 2021; Gopalkrishnan and Babacan 2015).

It encompasses various aspects of human life, such as language, religion, art, music, food, dress, and social norms, and should not be reduced to one of these aspects. It is not a single static entity but a dynamic system that evolves, influenced by interaction with others, practices within a society and various factors such as nationality, religion, gender, class (Bhugra et al. 2021; Gopalkrishnan and Babacan 2015; Kirmayer 2018; Kleinman and Benson 2006). However, research that somehow includes a cultural 'comparison', also requires acceptance of some kind of "essentialism" in culture, that is, the notion that a cultural group has specific and distinctive characteristics more shared among its members than among outsiders (Fischer and Poortinga 2018). In my research, I explore if this is the case in the understanding of mental health among East-African migrants, if they perceive their understanding to be different to the dominant ideas about mental health in Belgium. At the same time, also the dynamic and fluid aspect of 'culture' is taken into account, as I examine if migrating and living in Belgium influences these understandings.

1.3.4 Acculturation and integration discourses

Throughout the dissertation, the concepts of acculturation and integration are frequently mentioned. The concept of 'acculturation' was first defined by Berry (1989) as the process of adapting one's behaviour, values and beliefs as a result of exposure to people with different cultural background. Berry and colleagues developed a widely-used framework to describe the acculturation strategies of both migrants as well as the society (1989, 2001, 2006). In this framework, acculturation strategies are based on two dimensions. The first dimension assesses the extent to which migrants and their descendants engage in activities within the host country, while the second explores whether cultural identity remains significant for those migrants (Berry et al. 1989). Combining these two dimensions, Berry delineates four types representing potential acculturation strategies: 'integration', 'assimilation', 'separation' and 'marginalisation'. Similar types are attributed to the strategies of the larger society, which Berry referred to as, respectively, 'multiculturalism', 'melting pot', 'segregation' and 'exclusion' (Berry 2001). In Berry's framework, integration is described as the acculturation strategy for migrants who aim to retain their cultural heritage while seeking contact with other cultures. However, the concept of 'integration' is used differently in everyday life discourses than in academic discourses and remains vague. Its use covers a wide range of interpretations and contains certain assumptions that are often taken for granted but need further refinement and examination (Adam 2013; Favell 2001; Van Praag et al. 2016). Theoretical definitions of the term vary widely and often deviate from its popular or political usage (Favell 2001). 'Integration' often refers to the – one-sided - incorporation of immigrants into an existing social system, encompassing both their socio-economic incorporation into the host society and their socio-cultural adaptation to that society (Saharso 2019; Alba & Nee, 1997; Snel & Leerkes, 2006). This approach, as

also suggested in Berry's network, suggests that migrants can choose how to 'adapt' to the dominant society, while structures of power and inequality within that society are at play and can limit migrants their 'choice' to adapt (Saharso 2019). Additionally, this view has been debated as a linear, one-direction process in which immigrants move towards the host society, rather implying an assimilation strategy: the immigrant is supposed to 'adapt' to an assumed sociocultural homogeneity (Saharso 2019; Van Praag et al. 2016). This reasoning neglects the fact that the dominant society might be as diverse and stratified as migrants themselves (King & Lulle, 2016). While acknowledging the debates surrounding the term, this dissertation does not centralize these discussions. In the following, the term 'integration' is pragmatically employed, and defined as 'the dynamic, multidimensional and two-way process [between migrant and dominant society] of adaptation to a new society, taking place over time' (Alencar & Tsagkroni, 2019).

1.4 Research Objectives

This study aims to explore and integrate the following research objectives to reach the overall aim:

Research Objective 1 (RO1): To explore the explanatory models of mental health among East-African migrants.

Within this research objective I focus on understanding the explanatory models of mental health held by East-African migrants living in Belgium. I seek to gain insights into the unique perspectives and cultural nuances of East-African migrants, contributing to a comprehensive understanding of mental health within this population. Explanatory models encompass their beliefs, attitudes, and cultural frameworks related to mental health, including their understanding of the causes, symptoms, healthcare-seeking behaviour and appropriate treatments for mental health issues (Dinos et al. 2017; Kleinman, Eisenberg, and Good 1978). In order to identify shared patterns in explanatory models within this target group, my emphasis is directed towards diverse categories of migrants, rather than exclusively concentrating on a singular type of migration. By identifying commonalities within this group, fundamental cultural and contextual aspects that shape the understanding of mental health can be unveiled. My aim is to investigate whether explanatory models within the country of origin accompany East-African migrants to Belgium and, if so, what implications this holds for Belgian mental healthcare. Explanatory models are dynamic and are subject to change through different experiences. Therefore, I additionally aim to explore whether East-African migrants in Belgium perceive if their migration trajectory has influenced their mental health perceptions.

Research Objective 2 (RO2): To explore the perceptions of (mental) healthcare professionals in Belgium regarding the explanatory models of mental health among sub-Saharan African migrants.

With this research objective, I aim to investigate the perceptions of (mental) healthcare professionals in Belgium on the explanatory models of mental health among sub-Saharan African migrants compared to their own understanding of mental health, specifically comparing the perspectives of professionals with and without a similar migration background to East-African migrants. By examining these perceptions, I seek to identify any differences or similarities in the understanding, attitudes, and treatment approaches between healthcare professionals with and without a similar migration background towards mental health among sub-Saharan African migrants. This comparison helps shedding light on the potential impact of professionals' own backgrounds and experiences on their perceptions and healthcare practices, leading to a more nuanced understanding of how healthcare professionals can effectively address the mental health needs of East-African migrants.

Research Objective 3 (RO3): To explore the potential implications of research objective 1 and research objective 2 for the (mental) healthcare provision for migrants.

With the third research objective, I focus on the potential implications of the explanatory models and perceptions identified in research objective 1 and research objective 2 for the provision of healthcare services in Belgium. By integrating the findings from the first and second research objectives, this research aims to identify potential gaps, challenges, and opportunities in the delivery of mental healthcare to East-African migrants in Belgium. I aim to do so using qualitative research data (building further on RO1 and RO2) and systematically reviewing the literature to build a theoretical foundation for developing tailored services and interventions.

Understanding the differences and commonalities within the explanatory models of East-African migrants and the perceptions of healthcare professionals enables the identification of culturally sensitive and inclusive approaches to mental healthcare provision. With this research objective I aim to inform policy and practice by highlighting the need for tailored services and interventions that address the specific mental health needs of East-African migrants, ultimately contributing to the reduction of disparities in access to mental healthcare and enhancing the inclusivity in the delivery of that care. With a review of the existing literature on interventions that have successfully contributed to improving the mental health of migrants and ethnic minorities I aim to identify key factors essential for the development and implementation of such interventions. In this review, I extend the focus towards other migrant groups as well as ethnic minorities, because the influence of social determinants on mental health extends across multiple generations within migrant communities, and among different ethnic groups (Erel, Murji, and Nahaboo 2016; Spallek, Zeeb, and Razum 2011). This research objectives aims to offer both empirical insights and a theoretical groundwork that can serve as practical guidance for

policymakers and healthcare professionals in designing and implementing culturally sensitive mental health interventions.

1.5 Studies overview

In the results chapter (chapter 4) of this dissertation, I present three studies based on my qualitative empirical research, as well as a review study, which provides answers to my research objectives.

In my first study, I focus on my first research objective exploring the explanatory models of mental health among East-African migrants and focus on how these explanatory models influence the healthcare-seeking behaviour of the East-African migrant population in Belgium.

- 4.1 **Article 1**: "God is my psychologist": How explanatory models of mental health influence healthcare-seeking behaviour among first generation East-African migrants in Belgium

In the **second** study, published in the Journal *Culture, Medicine and Psychiatry*, I provide an answer to my second research objective, exploring the perceptions of (mental) healthcare professionals on the explanatory models of mental health among sub-Saharan African migrants, making a comparison between professionals with and without a similar migration background.

- 4.2 **Article 2**: Explanatory Models of (Mental) Health Among Sub-Saharan African Migrants in Belgium: A Qualitative Study of Healthcare Professionals' Perceptions and Practices

In my third empirical study, I focus on my third research objective, exploring the implications of differences and commonalities in the explanatory models among East-African migrants and perceptions of healthcare professionals, for the (mental) healthcare provision for migrants. By juxtaposing the results from my two previous empirical studies, I identify areas for improvement in the mental healthcare system in Belgium and draw conclusions to render the healthcare system more inclusive.

- 4.3 **Article 3**: Impacts for mental health care practices from juxtaposing perspectives on mental health and healthcare provision from healthcare professionals and East-African migrants in Belgium.

In the fourth study, which has been published in *Global Mental Health*, I provide an answer to the fourth objective. A scoping review was performed on what interventions already exist in Europe to improve the mental health and well-being of migrants and ethnic minority groups. The success factors in the development and implementation of those interventions are examined and reveal theoretical and practical insights in how to develop and implement successful interventions to address migrants' mental health.

- 4.4 **Article 4:** Interventions to improve the mental health or mental well-being of migrants and ethnic minority groups in Europe: a scoping review

CHAPTER 2. EXISTING KNOWLEDGE AND THEORETICAL FRAMEWORK

In this background chapter, I provide a comprehensive context for my PhD research by delving into the existing scientific literature on the topic. The chapter is divided into three parts, each highlighting critical aspects that underscore the relevance of my study.

In the first part, I explore the relevance of focusing on mental health among migrants due to their heightened risk of developing mental health problems. Extensive research indicates a concerning prevalence of mental health issues among migrants in Europe. I explain how migration is a social determinant for developing mental health problems, highlighting the impact of pre-, during, and post-migration factors to mental health problems. Additionally, I discuss the role of resilience and coping strategies in potentially mitigating mental health problems among migrants.

Despite their vulnerability, migrants remain underserved in mental healthcare services. In the second part, I therefore explore the factors contributing to this underrepresentation, including disparities in mental healthcare utilization among migrants and the existing limitations within healthcare systems towards migrant patients. A key aspect of my argument is the need to consider cultural differences in understanding mental health to enhance mental healthcare for migrants.

To build this argument, I explain in the third part how mental health is a social and cultural construct. The understanding of mental health varies across different cultures, leading to important implications in terms of causal attributions, symptom interpretations, diagnoses, and treatment decisions. Within the field of anthropology, the concept of 'explanatory models' emerges as a valuable framework to capture these diverse cultural understandings of mental health. Consequently, I emphasize the relevance of exploring these explanatory models in the context of migrant mental healthcare. As my research focuses on East-African migrants, I specifically discuss the dominant explanatory models of mental health within their region of origin. Understanding the mental healthcare practices prevalent in East-Africa further informs the background context of my research. To end this chapter, I explore what mental healthcare initiatives are available for migrants living in Belgium.

2.1. The importance of focusing on mental health among migrants

Migrants experience a radical change in their living conditions, work and general life stressors during their migration, which can impact their overall well-being (International Organisation for Migration 2009). Migration is often the result of a complex and multifaceted combination of economic, social, political, environmental, and personal reasons why people migrate (Castelli 2018), including aspects of voluntary and forced movement (Lindert et al. 2008). The process of migration is considered a grief process, characterized by loss and change (Bhugra 2004; Carta et al. 2005). The mental health of

migrants can be significantly impacted by various situations that they encounter before, during and after their migration process (International Organisation for Migration 2009). Although migrants are sometimes described as having better mental health than the general population, due to their "psychological hardiness" upon arrival at their destination country (Dhadda and Greene 2018), evidence for this effect to decline over the years is convincing (Elshahat, Moffat, and Newbold 2021; Lindert et al. 2008; Priebe et al. 2016; Salami, Salma, and Hegadoren 2019). Migration is associated with mental stressors and suffering (Bhugra 2004; Derr 2016; Obrist and Büchi 2008), and migrants and their descendants are at a greater risk of developing mental health issues (Missinne and Bracke 2012; Purgato et al. 2021; Turrini et al. 2017). Extensive evidence demonstrates a higher prevalence of mental health problems among migrants in Europe (Martin and Sashidharan 2023; Missinne and Bracke 2012; Patel et al. 2017), however, they remain underrepresented in mental healthcare services (Ceuterick et al. 2020; Graetz et al. 2017; Lebano et al. 2020).

2.1.1 Higher prevalence of mental health problems among migrants

There is a significant body of evidence indicating that migrants are at a higher risk of developing mental health problems than non-migrants. Global review studies indicate higher prevalence numbers of mental health issues among migrants, compared to the general population, such as post-traumatic stress disorder (PTSD), depressive and anxiety disorders (Blackmore et al. 2020; Foo et al. 2018; Patanè et al. 2022; Turrini et al. 2017). Considering the European region specifically, recent review studies on prevalence numbers among migrants are rather scarce. In their scoping review, Patel and colleagues (2017) found that the prevalence of mental health problems among migrants in register-based studies varied widely across different countries and depended on the specific mental health outcome studied. They included 51 studies that were mostly conducted in Nordic European countries or The Netherlands (next to a few studies from Israel and Canada), and used national population-based registers to investigate the mental health of migrants. The authors did not calculate pooled or aggregated prevalence rates (i.e. the overall or summary estimate of the prevalence of that condition across all the studies included in the review), but concluded that migrants had a higher risk of developing schizophrenia or bipolar disorder. Martin and Sashidharan (2023) conducted a systematic review of 8 West-European studies examining the mental health of adult irregular (persons moving outside regular migration channels, IOM 2019) migrants to Europe. They reported prevalence rates to vary significantly: from 8 to 86% for depression, from 3.1% to 81% for anxiety issues, from 3.4% to 57.6% for PTSD.

Although a variety in methodologies and representativity of samples made it difficult to compare studies within their review, the authors could conclude that the majority of studies in their review indicated higher rates of depression, anxiety and PTSD in migrant groups, compared to general population groups.

Missinne and colleagues (2012) report in their population-based study with data from 23 European countries that depressive symptoms are more experienced among immigrants and ethnic minorities compared to the majority population. This snapshot of review studies provides strong evidence that migrant populations are at a higher risk of developing mental health problems compared to the general population, more in particular PTSD, depression, and anxiety problems. Prevalence numbers are even higher when considering certain subgroups within these migrant populations, such as women (Blackmore et al. 2020; Martin and Sashidharan 2023; Missinne and Bracke 2012; Patel et al. 2017), irregular migrants (Martin and Sashidharan 2023), refugees and asylum seekers (Blackmore et al. 2020; Patel et al. 2017; Turrini et al. 2017) and especially those who had experienced torture or other forms of trauma (Blackmore et al. 2020; Patanè et al. 2022).

However, it is important to note that the prevalence numbers vary across studies and differ according to factors such as the country of origin, duration of migration, and others (Kronick 2018; Martin and Sashidharan 2023). Comparing prevalence numbers is further complicated as varying definitions of who is considered a 'migrant' and different methodologies are used across settings (Foo et al. 2018; Priebe et al. 2016). Additionally, the strong variation in prevalence numbers might also be explained by the limited cross-cultural validity of used diagnostic tools, given that understandings of what deviancy and normalcy are, differs across cultures (Chentsova-Dutton and Ryder 2020; Haroz et al. 2017; Kirmayer, Gomez-Carrillo, and Veissière 2017; Lindert et al. 2008; Osborn, Kleinman, and Weisz 2021). Most prevalence studies use diagnostic categories as described in the Diagnostic and Statistical Manual for Mental Disorders 5 (DSM-V, American Psychiatric Association 2013) or the International Statistical Classification of Diseases and Related Health Problems (ICD, World Health Organization (WHO) 2023). The applicability of these diagnosing tools, however, is debated as they are based on evidence coming from largely white population samples and often lack cultural sensitivity (Rose and Cheung 2012). Efforts are increasingly made to assess and improve the cross-cultural applicability of such tools (Aggarwal 2021; Ayinde and Gureje 2021). For instance, in the DSM-V the use of 'culture-bound syndromes'[1] in previous DSM editions is problematized for ignoring the clinically important cultural differences involving culturally distinctive explanations of distress rather than configurations of symptoms (Bredström 2019). Additionally, a chapter on Cultural Formulation, introduced in the DSM-IV and revised for the later editions, should help the clinician to evaluate cultural aspects of the diagnostic procedure. However, despite these efforts, these manuals and diagnostic classifications remain to be criticized as ethnocentric and relying on a categorical, descriptive approach that may homogenise and simplify diagnoses, applying a static notion of culture. It is questionable if these classifications, starting from a

[1] Locally expressed illnesses that only appear among certain culturally defined groups (Bredström 2019)

Global North perspective on mental health, can ever be universally applicable. Culturally diverse perspectives on health and well-being might go beyond the approaches of these manuals and classifications, and therefore might not fit into the dominant diagnostic schemes used (Patel and Hall 2021).

2.1.2 Migration as a social determinant of mental health

Social determinants of health refer to the broader social and economic conditions that impact an individual's health outcomes and include factors such as income, education, employment status, social support networks, and access to healthcare (Davies et al. 2009; Whitehead and Dahlgren 1991). These determinants can create significant health inequalities and can have a significant impact on mental health outcomes. For example, individuals who experience poverty or social isolation may be at higher risk for mental health conditions such as depression or anxiety (Davies et al. 2009).

Migration on itself is considered a social determinant of (mental) health as migration, acculturation and integration trajectories are complex and challenging processes that can expose individuals to various risk factors that may negatively affect their mental health and well-being (Bhugra 2004; Davies et al. 2009; Derr 2016; Priebe et al. 2016). The unique circumstances surrounding migration, such as leaving one's home country, adapting to new cultural norms, and dealing with different social and economic conditions, create stressors that potentially can lead to the development of mental health problems. The social determinants for developing mental health issues among migrants are often categorized into pre-migration, during migration (peri-migration), and post-migration factors (Bhugra 2004; Priebe et al. 2016; World Health Organization 2022). During each of these phases, different social determinants can impact an individual's mental health outcomes.

2.1.2.1 Pre-migration

The pre-departure circumstances of individuals may already trigger adverse mental health outcomes at their places of origin, including poverty, violent political conflicts, or climate-related disasters (Abubakar et al. 2018; O'Malley 2018). Experiences of armed conflict, persecution, imprisonment, loss or murder of family members, torture trauma, sexual and other forms of violence and human rights abuses in the country of origin can lead to profound stress and increase the risk of mental health problems (Kronick 2018; Priebe et al. 2016; Uphoff et al. 2020). Also non-violent situations, such as difficult socio-economic circumstances in the countries of origin, difficult living circumstances due to climate change, limited access to education, employment and healthcare, economic disruptions, and individual or family-related stressors can impact the mental health status of migrants (Davies et al. 2009; Priebe et al. 2016).

2.1.2.2 During migration

Migration trajectories are not linear, but are often step-by-step journeys with temporary residences in different countries due to changing economic or political circumstances, financial barriers, physical obstacles and others (Snel, Bilgili, and Staring 2021). During each step of their migration journey, individuals may face various challenges that can impact their health and well-being. The modes of transportation used during transit, such as air travel, travel overseas by boat, walking across deserts, or hiding in trucks, can pose significant risks to individuals' safety and health (Abubakar et al. 2018). Exposure to environmental hazards, including infectious diseases, heat exhaustion, and dehydration, along the transit routes can also contribute to health risks (Abubakar et al. 2018). These often dangerous and difficult travel conditions can entail life-threatening situations and can have a profound impact on their mental health through the (additional) exposure to trauma, violence, abuse, and exploitation (Kronick 2018; Priebe et al. 2016). Throughout their migration journey, migrants can experience periods of confinement that can involve the exposure to insanitary circumstances, abuse and violence, and limited access to medical or social services, that again yield poor mental health (World Health Organization 2022).

While not all migration trajectories are related to violent and unsafe circumstances, the migration process in itself is a sensitive and stressful phase, even in the best possible conditions (Abubakar et al. 2018; Spallek, Zeeb, and Razum 2011). The separation from family members and uncertainty about the future, are factors that can cause stress and increase the vulnerability for adverse mental health outcomes among migrants (Kronick 2018; Priebe et al. 2016; Spallek et al. 2011).

2.1.2.3 After migration

Once in the destination country, migrants may undergo a difficult integration process (Castelli 2018) and may have to face additional and long-lasting resettlement stressors in various domains (Nowak et al. 2023; Priebe et al. 2016; Purgato et al. 2021). It is crucial to recognize that the reception and integration systems play a significant role in shaping the mental health outcomes of migrants. In many countries, these systems subject migrants to harsh and at times dehumanizing conditions (Von Werthern et al. 2018). The isolation and social exclusion experienced within these systems can further exacerbate existing mental health challenges among migrants, as they are often separated from their families and support networks, leaving them already vulnerable to a sense of loneliness and disconnection (Davies et al. 2009). Complex legal residence procedures can negatively affect migrants' mental health; especially lengthy residence applications that leave migrants in a constant state of uncertainty can be a source of stress (Priebe et al. 2016; Watters 2010). Residence status is an important predictor of mental health issues, as the study of Heeren and colleagues (2014) illustrates. Within this study, the authors compared the prevalence of psychopathology across five different groups of

individuals living in Switzerland: asylum seekers, refugees, illegal migrants, labour migrants, and native residents. Results indicated that, in line with the prevalence studies discussed earlier in this chapter, the prevalence of psychopathology varied across the different groups, with asylum seekers and illegal migrants having the highest rates of psychopathology, followed by refugees and labour migrants, and then residents. Additionally, during their residence application process, migrants are often subjected to periods of detention. While structural information on the effects of detention is rather scarce, harmful physical and mental health impacts have been documented. Overcrowding in detention or reception facilities, uncertainty about the detention period and the lack of adequate access to essential services can contribute to feelings of powerlessness, anxiety, and depression (Priebe et al. 2016; Von Werthern et al. 2018; World Health Organization 2022).

When residence is acquired and migrants settle in the destination country, they often live in poorer and difficult socio-economic circumstances compared to the local population which can increase and exacerbate (mental) health challenges (Davies et al. 2009; Spallek et al. 2011). Difficulties in finding accommodation and employment, or working in menial jobs, limited access to safe environments, adequate food and housing, and health care complicate the vulnerable mental health status of migrants further and are associated with a higher likelihood of depression (Bhugra 2004; Campbell et al. 2018; Hynie 2018; Priebe et al. 2016). These difficult living circumstances complicate full integration and are often a driver for social inequalities and exclusion (Davies et al. 2009; Priebe et al. 2016). Acculturation strategies with European lifestyles may further influence the mental health of migrants as it can cause experiences of social isolation (Castelli 2018; Davies et al. 2009). Migrants, also those with legal documents and in a more comfortable socio-economic position, may experience particular challenges due to language and cultural differences (Davies et al. 2009). Adapting to new surroundings and cultural practices can lead to significant levels of acculturative stress and social isolation, to feelings of loneliness, depression, and anxiety (Foo et al. 2018; Kronick 2018). Research among expats and foreign-born workers for instance, shows that they can suffer from homesickness, acculturation and occupational stress which can lead to a deterioration of their mental health (Doki et al., 2018; Hack-Polay 2020). These challenges can also interact (Kronick, Jarvis, and Kirmayer 2022). For example, social isolation and acculturation stress may contribute to feelings of depression and anxiety, which in turn may impact an individual's ability to build social support networks and adapt to a new culture. Experiences of social exclusion, often exacerbated by xenophobic political climates, are frequently associated with experiences of discrimination and racism among migrants (Delara 2016; Lindert et al. 2008; Nosè et al. 2017; Priebe et al. 2016; Von Werthern et al. 2018). Discrimination and racism have a tremendous effect on mental health and potentially lead to feelings of shame, anger, and hopelessness, which can place

vulnerable migrant groups further at risk for developing depressive, anxiety, and other mental health disorders (Kalra 2014; Kronick 2018; Nosè et al. 2017; Purgato et al. 2021; Turrini et al. 2017).

2.1.2.1 Cumulative and complex interplay of social determinants

While the categorization of social determinants in the pre-, during, and post-migration phases clearly illustrates the complex interplay between migration and mental health, it is also a simplified approach that overlooks the dynamic and cumulative nature of these determinants. Migrants undertake very diverse and multifaceted migration journeys (Abubakar et al. 2018; Bhugra 2004; Castelli 2018), wherein various health challenges intertwine and interact with social and economic inequalities at different stages of the migration trajectory (Kronick et al. 2022). Additional factors such as the gender, ethnicity, age, and the socio-economics status of people, as well as the forced or voluntary nature of migration, are cross-cutting social determinants throughout the migration trajectory (Bhugra 2004). To fully comprehend the mental health status of migrants, it is therefore crucial to consider the potential cumulative effects of these mental health challenges, as well as the social, economic, and political contexts in which migrants have lived throughout their migration trajectory (Kronick et al. 2022; Spallek et al. 2011). Refugees for instance, experience worse mental health outcomes, because of the pre-migration trauma and post-migration stressors, such as a difficult asylum procedure (Straiton et al. 2016; Porter & Haslam 2005). Moreover, these effects extend to subsequent generations, influencing the mental health status of migrant's offspring as well (Spallek et al. 2011). Similar mental health vulnerabilities have been observed among ethnic minorities born in European countries (Borrell et al. 2015; Hynie 2018; Ikram 2016; Myers 2009; Spallek et al. 2011). The mental health situation of children can be determined by the difficult socio-economic conditions of their parents (Spallek et al. 2011). Or, trauma can be transmitted to future generations through psychosocial mechanisms within parent-child attachment and intra-family communication styles, thereby rendering migrant descendants more susceptible to developing mental disorders like PTSD (Sangalang and Vang 2017; Silwal et al. 2019). The complex issue of trauma transmission is also not confined solely to familial bonds; indirect experiences of racial discrimination, racial profiling, and racism have also been demonstrated to impact the mental well-being of certain ethnic minority groups (Cénat 2020; Selvarajah et al. 2022).

2.1.3 Resilience and coping strategies among migrants

The cumulation of those multiple negative experiences can also generate the opposite effect, where migrants and their offspring generate unique strengths, sources of resilience and coping mechanisms from these experiences (Goodman et al. 2017). Resilience is the key ability that enables a person to achieve a well-balanced state of psychosocial health in the face of adverse and painful experiences (Ciaramella, Monacelli, and Cocimano 2022), and coping strategies are the specific behaviours,

thoughts, and emotions that individuals use to manage the stressors and challenges they encounter (Kuo 2014). While it is essential to identify migrants who are at an elevated risk, it is equally important to acknowledge that not all migrants experience these risk factors equally and people will respond differently (Babatunde-Sowole et al. 2020; Bhugra 2004). Some individuals demonstrate resilience and possess the capacity to navigate the challenges and stressors inherent in the migration process (Priebe et al., 2016). Migrants develop multiple ways to be better able to tolerate adversity, there is no single pathway (Goodman et al. 2017).

Resilience is often interpreted as limited to an individual's personal characteristics, however, social support, and contextual factors can also significantly contribute to an individual's ability to navigate adversity and mitigate the development of mental health problems (Coope et al. 2020; Dubus 2022). Personal strengths, such as optimism, self-efficacy, and a sense of purpose, enable migrants to maintain a positive outlook and effectively cope with challenges (Babatunde-sowole et al. 2016; Coope et al. 2020). Ways of thinking and reframing their negative experiences, can help migrants cope with their negative experiences (Goodman et al. 2017). Social factors, such as strong social support networks, both within their own ethnic community and in the host country, can serve as protective factors and sources of emotional and practical assistance (Babatunde-sowole et al. 2016; Coope et al. 2020; Dubus 2022). Transnational health networks can enhance a migrant's resilience and offer assistance and support. (Thomas 2010, Tilliikainen & Koehn 2011). Additionally, positive relationships with family, friends, and community members can provide a sense of belonging and validation, fostering resilience. Contextual factors, such as access to resources, opportunities for employment and education, and inclusive social policies, also contribute to the resilience of migrants by facilitating their integration and social participation and combating racism and discrimination (Babatunde-sowole et al. 2016; Coope et al. 2020). In that manner, migrants can benefit from their migration experience and opportunities offered in the destination country, resulting in increased resilience and reduced vulnerability to mental disorders.

Migrants often employ a range of coping strategies to navigate the migration process (Kuo 2014). Problem-focused coping involves actively addressing and solving problems, such as seeking employment or accessing healthcare services (Coope et al. 2020; Kuo 2014). Emotion-focused coping strategies focus on regulating emotional distress, such as seeking emotional support from others or engaging in activities that provide comfort or relaxation (Kuo 2014). Additionally, seeking social support, both within and outside of their migrant community, can provide migrants with a sense of validation, assistance, and comfort during difficult times (Kuo 2014; Olukotun, Gondwe, and Mkandawire-Valhmu 2019). Cultural and religious practices, including rituals, prayer, and meditation, can also serve as coping mechanisms by providing a sense of stability, meaning, and connection to one's heritage. The protective effect of

social and cultural integration, through language knowledge and acceptance of cultural values, cannot be underestimated (Bhugra 2004).

It is important to note that coping strategies are not fixed traits but can evolve and change over time (Kalra 2014). Migrants may adapt their coping strategies as they progress through different stages of the migration and integration process, face new challenges, and acquire new skills and resources. Moreover, the availability of support systems, such as culturally sensitive mental health services, community organizations, and government policies that promote social inclusion, can significantly impact the resilience and coping abilities of migrants (Coope et al. 2020; Dubus 2022; Olukotun et al. 2019). Reducing stress in the post-migratory context by cultivating resilience and promoting effective coping strategies can contribute to better mental health outcomes among migrants, fostering their overall well-being and successful integration into their host societies (Kronick 2018).

2.2. Mental healthcare for migrants?

Acknowledging and addressing migrant's mental health needs and providing supportive services is essential to prevent further challenges, as untreated mental health issues can impede successful integration and potentially have long-term consequences for both the migrant and the society in the country of arrival (World Health Organization 2022). By addressing their general and mental health needs, migrants can better adapt to their new environments, overcome psychological barriers, and contribute positively to their host societies (Legido-Quigley et al. 2019; Matlin et al. 2018; Rechel et al. 2013). Improved mental well-being allows migrants to engage in education, employment, and social activities, and fosters their independence, self-sufficiency, and overall integration. Prioritizing mental healthcare not only benefits migrants individually but also has broader societal advantages, including reduced healthcare costs, enhanced social cohesion, and increased economic contributions (Langlois et al. 2016; Siriwardhana, Roberts, and McKee 2017). However, migrants are underrepresented in conventional mental healthcare systems and different mechanisms hinder their successful integration in those systems (Ceuterick et al. 2020; Graetz et al. 2017; Lebano et al. 2020; Lindert et al. 2008). The low representation of migrants in conventional mental healthcare systems can be explained by a complex interplay of at the one hand, factors defining migrants' reluctance to seek mental healthcare in those services (Boukpessi 2021; Kirmayer et al. 2007; Knipscheer and Kleber 2008) with at the other hand, structural and systemic barriers impeding their access to mental healthcare services (Lebano et al. 2020; Uphoff et al. 2020). I argue that among these hindrances, differences in cultural understandings of mental health play an important role. It is by exploring, acknowledging and integrating the influence of both the understandings of the migrant patients, as well as those of the practitioners themselves, a more effective mental healthcare can be installed.

2.2.1 Mental healthcare use among migrants

Similar to general populations, socio-demographic factors, such as gender and age, play a role in use of mental healthcare services among migrants (Knipscheer and Kleber 2008; Scheppers et al. 2006; Selkirk, Quayle, and Rothwell 2014). For instance, young women show a greater willingness to seek psychological help. However, migrants in general are less likely to seek conventional mental healthcare and make limited use of available mental healthcare services compared to general populations within the countries of destination (Lu et al. 2020; Peñuela-O'Brien et al. 2022; Satinsky et al. 2019). Migrants also use services in a different manner: they visit primary healthcare practitioners, physical services, and emergency units more often with potential mental health issues, and make less use of preventative services (Graetz et al. 2017; Lindert et al. 2008; Lu et al. 2020; Peñuela-O'Brien et al. 2022). Research has shown that migrants are also high users of traditional, alternative and complementary medicine (Agu et al. 2018; De Meyer et al. 2022; Zeid, Andersen & Kristiansen 2018). This different usage of health services are often grounded in differing socially and culturally traditions, understandings and practices related to countries of origin (Ague at al. 2018). Some migrant groups might consider a problem to be related to physical health, due to a holistic or culturally specific understanding of mental health (Choudhry et al. 2016; Giacco et al. 2014). The way individuals perceive and conceptualize mental health influences their strategies for seeking healthcare and how people navigate the conventional healthcare system (Fauk et al. 2021; Graetz et al. 2017; Priebe et al. 2016). Studies have shown that in the Global South, family and community support as well as non-medical healing practices and religious rituals are more commonly sought, while in the Global North, individuals tend to seek treatment from a biopsychosocial perspective (Constantine et al. 2004; Fernando 2002; Gone and Kirmayer 2010; Kirmayer, Guzder, and Rousseau 2014; Muga and Jenkins 2008; Teferra and Shibre 2012).

2.2.1.1 Barriers to mental healthcare

Differences in how migrant population groups and healthcare providers within a healthcare system understand and approach mental health may impede migrants to seek mental healthcare (Derr 2016; Kirmayer et al. 2007; Kleinman and Benson 2006). Concerns related to a treatment, low confidence in the ability of services, mistrust in medication or biomedical healthcare approaches can lead to reluctance in seeking help (Ayalon and Alvidrez 2007; Fauk et al. 2022; Gone and Kirmayer 2010; Knipscheer and Kleber 2008; McCann 2016). Associated with this, migrants can be reluctant to access the healthcare system because of experiences of discrimination and racism by themselves, family or community members, such as healthcare providers refusing to provide care (Lebano et al. 2020). Also stigma is a strong barrier that withholds migrants from seeking mental healthcare (McCann et al. 2018; Satinsky et al. 2019). Even when migrants decide to seek mental healthcare in the country of residence,

they experience many structural and logistical barriers in accessing those services. Socio-economic factors, such as significant financial constraints, impede migrants to seek mental healthcare (Ahmadinia, Eriksson-Backa, and Nikou 2022; Kirmayer et al. 2007; Selkirk, Quayle, and Rothwell 2014). These could be a lack of health insurance, or limited access because of the high costs associated with mental healthcare (Selkirk et al. 2014). These financial barriers are found to be particularly challenging for migrants who are already struggling to make ends meet or who recently arrived in a new country and have not yet established themselves financially (Selkirk et al. 2014). In addition, structural factors can make it difficult for migrants to navigate the system and access care (Ahmadinia et al. 2022; Anthony 2015; Kirmayer et al. 2007; Scheppers et al. 2006; Selkirk et al. 2014). The legal status of a migrant defines what healthcare is available to him or her, and is dependent on legislation within the country of destination (Langlois et al. 2016). Migrants who are undocumented or have an uncertain legal status may therefore be afraid to seek healthcare due to fear of deportation or other legal consequences (Graetz et al. 2017). If a migrant has access to the healthcare system, the organization of mental health services and systems can serve as a barrier (Kronick et al. 2022). For example, there may be limited availability of mental health services in certain areas or long waiting times for appointments. Migrants may lack the knowledge about the organisation of the healthcare system, how to access services, what services are available and how to navigate them (Lebano et al. 2020; Selkirk et al. 2014). Also language is a huge barrier to mental healthcare, as it may cause difficulty communicating with healthcare staff (Giacco, Matanov, and Priebe 2014; Graetz et al. 2017). Mental health services may not have interpreters available to assist with communication (Kronick et al. 2022). Even if translation services are offered in healthcare services, true understanding can be challenging; some emotional expressions do not have a direct equivalent in another language for instance, which can lead to misunderstandings (Selkirk et al. 2014). A wide range of strategies are needed to overcome the barriers experienced by migrants such as reducing financial barriers, addressing mental health stigma and discrimination, advancing the role of interpreters and cultural mediators, as well as recognizing culturally diverse understandings of mental health and integrating these perspectives, through the development of culturally-sensitive approaches and community-based services (Fauk et al. 2021; Salami et al. 2019) .

2.2.2 Limitations of mental healthcare provision

Despite the evidence indicating the importance of addressing the unique mental health needs of migrants, there remains a significant gap in mental healthcare systems to do so (Matlin et al. 2018; World Health Organization 2013). Providing accessible and adapted mental healthcare services for migrants is crucial in helping them navigate and cope with potential adversities (Davies et al. 2009; Uphoff et al. 2020). It is assumed that both voluntary and involuntary migration will only increase in the

future, due to global warming, increasing violent conflicts and political oppression, as well as people searching for 'a better life' (Matlin et al. 2018). Migrants and their offspring are and will become increasingly bigger part of the society in arrival countries and therefore, it is important to structurally integrate their needs within healthcare systems in a sustainable and long-term manner.

The approaches of different European countries to integrate migrants' health are diverse and depend on various factors, including the particular patterns of migration and migrants entering the country, as well as the type of welfare state and legal system (Bradby et al. 2015; Davies et al. 2009). Access to healthcare for refugees, asylum seekers, and migrants varies across different countries in terms of regulation and laws (Lebano et al. 2020). But even when migrants have full access to healthcare services, among which specialized mental healthcare services, the approach of those services is crucial. Policies addressing migrants' health needs are more developed in some countries than in others. However, even where such policies exist, it is not always clear how well they are implemented in practice and whether all the relevant actors, including health and non-health providers and administrators are well informed about the policies (Davies et al. 2009). If the specific needs and contexts of migrants are not addressed, services will fail to fully include migrants in their system (Bradby et al. 2015; Peñuela-O'Brien et al. 2022). Inclusive health systems, however, benefit not only migrants or other vulnerable or socially excluded groups, but also are beneficial for the society as a whole (Rechel et al. 2013). Official instances such as the World Health Organization (WHO) and European Union (EU) support and call for organizing migrant-friendly mental healthcare services (Mental Health Europe 2019; Peñuela-O'Brien et al. 2022; World Health Organization 2013). However, commitment to implement these services is rather weak and there is still a long way to go (Graetz et al. 2017; Peñuela-O'Brien et al. 2022).

An important aspect to develop migrant-friendly mental health services is taking the different cultural understandings of mental health into account (Dinos et al. 2017; Fauk et al. 2021; Marsella 2011). However, within healthcare systems, there is a lack of comprehensive knowledge on how these different understandings play a role. Little attention has been given to how cultural understandings shape the experiences, help-seeking behaviour, and treatment preferences of migrants, as well as how the healthcare systems apply dominant cultural understandings that might have important limitations to include migrant patients. This hinders the development of culturally sensitive and effective mental healthcare services for this specific population. I argue that exploring how migrants perceive and understand mental health, as well as acknowledging the cultural understandings of the healthcare systems and their potential limitations, is crucial to contribute to the development of culturally responsive interventions and strategies that effectively address the mental health challenges faced by migrants.

2.3. Mental health: a social and cultural construct

Different societies, groups, cultures, institutions and professions have diverse ways of conceptualising the nature and causes of mental health (Amuyunzu-Nyamongo 2013; Scheid and Brown 2010). It is important to acknowledge that an individual's perception and understanding of mental health is shaped not only by one's cultural background but also by personal knowledge, interactions with individuals experiencing mental health problems, educational background, and various other factors (Grupp et al. 2018; Jimenez et al. 2012). We have therefore to be careful to not fall into cultural essentialism, by looking at culture as the only defining factor when considering a person's mental health status. Nevertheless, considering cultural understanding of mental health is essential, especially in the context of migrants and their mental health. Cultural understandings of mental health affect the way a person experiences and expresses distress, and seeks help (Amuyunzu-Nyamongo 2013; Chentsova-Dutton and Ryder 2020). Migrants with a different cultural background might express their mental health problems differently, and seek mental healthcare in a different manner, compared to the dominant society in the country of residence. Cultural understandings also have important implications on how professionals' diagnose and implement treatment within the mental healthcare system (Amuyunzu-Nyamongo 2013; Bhugra et al. 2021; Chentsova-Dutton and Ryder 2020). Awareness of their own and a patient's cultural understanding enables healthcare providers to offer culturally sensitive and appropriate interventions (Bhui and Bhugra 2002).

2.3.1 Cultural understandings of mental health

Culture can be seen as a lens through which people interpret and make sense of the world around them. It shapes individuals' perceptions of the world, their place in it, and influences their attitudes and behaviours in both subtle and explicit ways (Bhugra et al. 2021; Kleinman and Benson 2006). Culture influences our understanding of health and illness (Bhugra et al. 2021; Kirmayer 2018). Within different societies, groups, institutions, and professions different beliefs about mental health and illness, their causes, health-seeking behaviour as well as attitudes towards healthcare systems and appropriate treatment methods exist (Amuyunzu-Nyamongo 2013; Kleinman and Benson 2006).

Cultural differences in mental health understandings have to be considered in their historical roots (Kirmayer, Guzder, and Rousseau 2014). An important aspect to consider in cultures of the Global North, has been the distinction between mind and body. This differentiation led to the separation between physical and psychological health, resulting in the distinctive domains of study of the 'psyche', i.e. psychology and 'abnormalities of the study', i.e. psychiatry. It found its origin in the ancient Greek empire in the ideas of the philosopher Plato and Artistotle, and was later popularized by the French

philosopher René Descartes (Fernando 2002; Mehta 2011). These notions of the Cartesian dualism of body and mind, had a significant impact on the development of medicine in the Global North. Through its demythologisation, the body could now be studied in its physiological and anatomical appearance. The field of medicine emerged with a focus on treating physical symptoms. Together with later evolutions in the philosophical movement of positivism, emphasizing the empirical observation and scientific methods as the only valid sources of knowledge, the foundations of the biomedical view were laid, in which the body was fragmented into organs and functions (Fernando 2002; Mehta 2011; Stroeken 2017).

A biomedical approach focuses on the biological aspects of disease and emphasizes the physical mechanisms of illness and views health conditions as primarily caused by biological factors such as pathogens, genetic abnormalities, or physiological dysfunctions (Fernando 2002). Treatment is centred around diagnosing and treating these biological abnormalities through medical interventions (Bracken et al. 2012; Fernando 2002). This reductionist and dualistic view of mental health and illness often fails to account for the cultural and social factors that shape the experience and expression of symptoms (Bracke 2016; Fernando 2002; Kirmayer et al. 2017; McCann 2016). The biomedical approach prioritizes objective scientific evidence and often neglects subjective experiences, cultural beliefs, and social contexts that shape people's interpretations of health and illness (Gritti 2017; White et al. 2017). Cultural differences in health beliefs, practices, and expectations may not be fully accounted for, potentially leading to misunderstandings, misdiagnoses, or inadequate treatments (Bracken, Giller, and Summerfield 1995; Ojagbemi and Gureje 2021).

Mental health services have therefore integrated the biopsychosocial model, a holistic approach proposed by George Engel (1977; Gritti 2017; White et al. 2017). This biopsychosocial model recognizes that individual health is influenced by not only biological factors but also psychological factors (such as thoughts, emotions, and behaviours) and social factors (such as family, community, and cultural context). While the biopsychosocial model correctly points to the fact that there are distinct perspectives on health, the model has been widely debated as it still prioritizes a biological cause and does not explicitly address the specific cultural interpretations and influences on health and illness (Gritti 2017; Thomas, Bracken, and Yasmeen 2007; White et al. 2017). The biopsychosocial framework separates between mind and body as it distinguishes between physical and psychological factors.

Cultures outside the Global North did not make the distinction between mind and body, and often hold holistic perspectives on health, viewing the human being as an integral entity in constant interaction with the physical and social environment (Fernando 2002). In several African cultures for instance, the body, as well as disease, occurs not just in a biological reality (Good 1977; Olsen and Sargent 2017). They also take place in a specific time, in the social world, in nature, and often within a particular

mystical setting. These contexts provide other associations to the body and to disease that extend beyond the biomedical model. For instance, in Rwandan culture, an illness is seen as a break in the harmony of one's life, attributed to either a physical problem created by a magical power, or an intangible force such as God, local spirits, or ancestral spirits (Gatarayiha et al. 1991). How the human body is considered, is thus influenced by culture, and as a result, different cultural beliefs and practices offer various explanations for the causes of illness, define how people will seek help to deal with that illness and provide a range of options for medical treatment. In one culture, an illness can be viewed as a mental health problem resulting from a biological dysfunction, while in another culture, it may be seen as a physical issue stemming from disrupted social relations (Lechuga 2012).

In literature, cultural differences are often described with a focus on their causal beliefs regarding mental health, with the Global North tending to hold multifaceted explanations that encompass biological, genetic, psychosocial, environmental factors, and stressful life events (Fernando 2002; Grupp et al. 2018; Ventevogel et al. 2013). In the Global South, understandings of mental health more often also incorporate religious, magical, and supernatural explanations (Grupp et al. 2018). This is reflected in conventional healthcare systems and practices. Biopsychosocial practices prevail in conventional mental health services in Global North countries and often emphasize an individualized approach, where the patient is positioned at the centre of analysis, interpretation, and intervention within their social context (Babalola, Noel and White 2017; Kirmayer & Young 1997). Global South cultures, such as African cultures for example, exhibit a form of 'medical pluralism'(Cox and Webb 2015; Olsen and Sargent 2017). In this context, a biomedical approach coexists and sometimes blends with local health practices, including Islamic healing, herbalism, ritual specialisms, and evangelical healing. Those approach often lean towards a more collective approach.

It is crucial to note that these Global North/Global South distinctions should be understood in broad terms, reflecting general observations rather than being treated as absolute demarcations. For instance, it's worth highlighting that religiousness can play a role in mental health understandings in the Global North and can be considered in clinical interventions (Kao, Peteet, and Cook 2020; Koenig, Al-Zaben, and VanderWeele 2020). Additionally, also magical beliefs and folkloristic practices have been prevalent in Global North cultures and have not entirely disappeared (Kirkland et al 1992; Wilson 2003). A range of traditional, alternative and complementary medicine exists in parallel with conventional mental healthcare practices in the Global North (Agu et al. 2019; Fjaer et al. 2020, Zeid et al. 2019). Moreover, the influence of globalization, the internet, and social media has further blurred the distinctions between the Global North and Global South in perspectives on mental health and the implementation of mental health services (Tribe & Melluish, 2014).

2.3.2 An anthropological perspective to mental health: the concept of explanatory models

To capture these differing cultural understandings of illness, the concept of an "explanatory model" was introduced by anthropologist Arthur Kleinman and colleagues (Kleinman et al. 1978). Kleinman's framework of explanatory models emerged from his fieldwork in China and Taiwan and recognized the differences across cultures with regards to thoughts and concepts about the causality of mental health problems. Explanatory models "ascribe meanings to symptoms, evolve causal attributions and express suitable expectations of treatment and related outcomes" (Dinos et al. 2017, p. 106). It underscores the non-universal nature of an illness and how it is a socially and culturally constructed experience, not only the result of a purely biological cause (Lechuga 2012). The term illness is here used to cover the experience of the individual of the 'disease', which refers to the biological abnormalities (Boyd 2000; Kleinman et al. 1978). Explanatory models capture those factors outside the individual and refer to cultural symbols, experiences, and expectations associated with a specific illness category (Lechuga 2012; Patel 1995). Explanatory models therefore provide a holistic view of the studied illness and might reveal cultural idioms used to express the experiences of that illness. Anthropological studies have shown that various psychological phenomena are interpreted differently in different cultures (Williams and Healy 2001). For instance, symptoms such as 'thinking too much' or 'a disturbed mind' which might be categorized as symptoms of nonpsychotic disorders in the Global North and typically treated with psychiatric interventions, can instead be interpreted as indicators of a well-recognized local syndrome within African cultures (Ventevogel et al. 2013). In these cultures, such symptoms are often addressed through social support or traditional healing methods.

Later research criticized the view that explanatory models are a unified set of beliefs that can be defined for a specific culture and has pointed to the fact that explanatory models can be dynamic, diverse and complex (Williams and Healy 2001). Explanatory models are subject to change and adaptation across time and circumstances, and can vary not only between individuals but also within an individual and among groups (Dein 2003; Williams and Healy 2001). In most cultures, a shared explanatory model has developed, to which many of its members commonly refer. However, each individual may have their own interpretations and unique ways of explaining things, based on individual experiences (Dein 2003). It is possible for a person to simultaneously hold different explanatory models, some of which may be conceptually incompatible (Bhui, Rüdell, and Priebe 2006). For example, an individual might combine biomedical and religious frameworks to explain and cope with an illness. This dynamic view on explanatory models is especially relevant in the context of migration. Human migrations lead to situations where individuals with distinct cultural explanatory models of mental health live together, exchange ideas, and encounter healthcare systems that may rely on differing explanatory models

(Grupp et al. 2018). Multicultural communities are always changing and influencing many factors, also changing people's explanatory models over time and place, and across generations (Lechuga 2012). When individuals migrate from one cultural context to another, their explanatory models of mental health problems can be influenced, affecting their attitudes towards treatment, healthcare systems, and practitioners (Gopalkrishnan and Babacan 2015; Priebe et al. 2016).

2.3.3 Relevance of explanatory models for migrant mental healthcare

Kleinman's research on explanatory models in the context of mental healthcare revealed that there were often differences in the explanatory models held by patients and health professionals (Kleinman 1977). When patients and health practitioners rely on their own explanatory models, this can create difficulties as they do not necessarily align. This could potentially impact the quality of care delivered. Differences between patients' and practitioners' explanatory models of mental health can lead to errors, treatment-related issues, and can also affect the therapeutic relationship (Bhui and Bhugra 2002; Marsella 2011). The relevance of explanatory models in migrant mental healthcare is therefore twofold. *First*, as explanatory models shape the experiences, help-seeking behaviour and treatment preferences of migrants, gaining insight in the explanatory models of migrant patients helps to fully capture the unique perspectives and needs of this population, and informs the provision of appropriate mental healthcare (Dinos et al. 2017; Gone and Kirmayer 2010). *Second*, professionals' and institutions' explanatory models are themselves not culture-free, and might clash with the explanatory models of migrant patients. Therefore, professionals should be aware of their own explanatory model, explore its implications and acknowledge potential limitations (Dinos et al. 2017; Gone and Kirmayer 2010).

2.3.3.1 Exploring migrants' dominant explanatory model of mental health

Explanatory models influence the way in which individuals experience and express symptoms of mental health problems (Gone and Kirmayer 2010). Certain symptoms may be more prominent or distressing in some cultural contexts than others. For example, what is labelled 'depression' in the DSM, may be characterized by somatic complaints (e.g., fatigue, pain) in some cultures, while in others it may be associated with affective symptoms (e.g., sadness, guilt). Additionally, cultural factors such as stigma, shame, and social support affect the way that individuals cope with and seek help for their symptoms, and which kind of medicine they see as adequate or preferable (Gone and Kirmayer 2010). Exploring the variations in explanatory models may therefore help in understanding people's help-seeking and service utilization (Patel 1995; Weiss 1997). While some cultures may prioritize traditional healing practices or seek help from community leaders or religious figures, rather than seeking formal psychiatric treatment (Haroz et al. 2017), others may place a greater emphasis on family or social support, rather than individual psychotherapy or medication. When migrants seek healthcare in a new

country, their ideas about illness may clash with the explanations and treatments provided by local healthcare practitioners (Lechuga 2012). If healthcare providers do not understand how sociocultural factors influence people's beliefs about illness, it can lead to unequal health outcomes, like e.g. worsening of a condition when people do not follow their prescribed treatments. Understanding a migrant patient's explanatory model is thus fundamental to provide appropriate and equal care (Gone and Kirmayer 2010; Littlewood and Lipsedge 2005). It will gain a deeper understanding of how mental health issues are perceived, labelled, and attributed within their respective cultural contexts (Dinos et al. 2017). Explanatory models do not only offer health professionals culture- and context-specific information, which improves their diagnostic accuracy, but more significantly, they provide them with nuanced insights into cultural beliefs and values.

2.3.3.2 Exploring professionals' dominant explanatory models

Even when migrants do have access to regular mental healthcare, the quality of care they receive is shaped by the experiences and attitudes of health professionals. Professionals' explanatory models may be influenced by their training in a particular epistemological framework and may face particular limitations when interacting with patients from different cultural backgrounds (Aidoo 2001; Kleinman and Benson 2006; Marsella 2011). Kleinman pointed to the danger of the 'category fallacy', the assumption that biomedical psychiatric categories are universal and symptoms are exclusively interpreted within this categorisation, thus overlooking other cultural ways of characterizing distress (Antić 2021; Jarvis and Kirmayer 2021; Kleinman 1977). Current dominant psychiatric and medical models are based on prevailing collective explanatory models in the Global North, which are themselves explanatory models and certainly not 'culture-free' (Kleinman 1977; Ogundare 2020). Clinicians should therefore be aware of the potential biases and limitations of their own cultural frameworks as they may not adequately capture the experiences of people from different cultural backgrounds (Dinos et al. 2017; Gone and Kirmayer 2010; Kleinman 1977). Failing to consider the understandings and modes of expression relevant to patients can lead to diagnostic errors, or focus too much on a medical treatment (Jarvis and Kirmayer 2021; Lechuga 2012). These issues have contributed to the labelling of culture and culturally adaptive behaviours as pathologies, misdiagnosing and a higher number of internment or collocation among migrant patients (Barnett et al. 2019; Ogundare 2020). This can give rise to dangerous practices regarding ethnic and racial disparities in accessing mental healthcare, institutionalized racism, and racial stereotypes within the healthcare system (Cénat 2020; Lebano et al. 2020).

A systematic review among European professionals showed that they often feel incompetent to address the mental health issues among migrants because, amongst other reasons such as the legal and socio-economic hindrances mentioned earlier, the explanatory models of migrants are different from their

own biomedical perspective (Peñuela-O'Brien et al. 2022). Indeed, most conventional healthcare services in European countries, predominantly hold a clinical understanding of mental health that is rooted in biomedical or biopsychosocial models and that may not necessarily coincide with the mental health understandings of migrants (Bradby et al. 2015; Fernando 2002; Teferra and Shibre 2012). Community mental health centres in Belgium, for instance, provide ambulatory specialized care that is provided by a multidisciplinary team (the minimal team consists of a psychiatrist, a psychologist, a social worker and a reception service) entailing a biopsychosocial approach of the patient's problems (Mistiaen et al. 2019). While these biomedical and biopsychosocial models have significant value in understanding and addressing health and illness (Mills and Fernando 2014), they may not fully consider different explanatory models due to their primary focus on biological or broader psychological and social factors.

2.3.3.3 Exploring explanatory models contributes to better healthcare

Recognizing and integrating cultural perspectives is crucial for providing comprehensive and culturally sensitive healthcare. Many healthcare professionals and researchers now advocate for a more comprehensive approach that integrates different cultural understandings into biomedical and biopsychosocial models to provide culturally sensitive and effective care (Kirmayer et al. 2017). There have been efforts to develop models and frameworks that explicitly incorporate cultural interpretations of health and illness. For example, ethnopsychology has gained importance in France (Sturm, Baubet, and Moro 2010) or the cultural formulation interview (CFI) has found its entrance in transcultural psychiatry practices (Jarvis et al. 2020). These approaches recognize the role of culture in shaping health beliefs and behaviours, helping healthcare providers consider cultural interpretations and provide more culturally responsive care. However, the extent to which these efforts have brought about significant changes in the prevailing approach within regular clinical practice is still questionable. International studies have shown that healthcare providers may experience feelings of uncertainty when delivering psychosocial care to migrants. This uncertainty arises because the learned professional behaviours may not always be suitable or applicable when caring for migrant populations. As a result, care providers may feel a sense of incompetence, leading to potential disruptions in the efficiency of care delivery (Lindert et al. 2008; Peñuela-O'Brien et al. 2022). Healthcare providers may misinterpret potential mental health issues among migrants, due to cultural differences in understanding about mental health problems (Davies et al. 2009; Lindert et al. 2008). Kleinman argued that for health workers to provide effective and compassionate care, they must be aware of the patient's explanatory models, particularly when there are cultural or social differences between the health worker and the patient (Kleinman et al. 1978). Exploring both the patient's and their own explanatory model enables practitioners to navigate between cultural perspectives and tailor their approach to meet the needs of their patients

and establish an effective therapeutic relationship (Bassey and Melluish 2013; Mollah et al. 2018). Patients have been found to be more satisfied with their treatment when the clinician and the patient share an explanatory model (Bhui and Bhugra 2004; Callan and Littlewood 1998; Marsella 2011). A practitioner should be aware of the patient's and their own explanatory model, and how they alter over time. Additionally, they should learn the skill to recognize, consider and question the influence of these models on how they assess and treat their patients (Dinos et al. 2017).

Healthcare professionals equipped with cultural competence skills still appear to be more of an exception rather than the norm, with the responsibility falling on individuals to take the initiative to educate themselves and develop skills in culturally sensitive practices (Horvat et al. 2014). However, it is not solely the responsibility of the individual health professional to reflect on explanatory models. Different explanatory models should also be considered in the design and delivery of health promotion interventions and healthcare services (Lechuga 2012). By recognizing diverse perspectives and incorporating cultural norms, mental health services can be better tailored to meet the needs of people with diverse backgrounds. It is necessary to ensure that migrant population groups are effectively reached, to inform healthcare interventions to better serve these populations and to include them in healthcare services (Choudhry et al. 2016; Issack 2015; Knipscheer and Kleber 2008). People from different cultural backgrounds have different preferences in content provision, sources of communication, and information channels used. Knowledge on explanatory models will also help to understand treatment outcomes as well as to develop culturally competent practices, and appropriate psychotherapy (Dinos et al. 2017; Patel 1995; Weiss 1997). Previous research has shown that when mental health services are adapted to meet the cultural needs of ethnic cultural minority groups, it leads to improved utilization rates and better outcomes (Said, Boardman, and Kidd 2021). Culturally appropriate mental health services foster trust, improve engagement with mental health services, and reduce disparities in mental health outcomes for migrant populations (Bassey and Melluish 2013; Lechuga 2012).

2.4 Explanatory models in East-Africa and migrant mental healthcare in Belgium

This section discusses two important topics in the context of my PhD research. I start with describing what is known on the prevailing explanatory models of mental health in East-Africa and how these might influence mental healthcare use in East-Africa. The central question driving my PhD-research is whether these explanatory models accompany East-African migrants to Belgium and, if so, what implications this holds for Belgian mental healthcare. Therefore, I provide an overview of the current landscape of mental healthcare for migrants in Belgium, highlighting specific initiatives.

2.4.1 Dominant explanatory models of mental health in East-Africa

In contemporary African contexts a "medical pluralism" has emerged, reflecting the historical and cultural diversity across the continent (Olsen and Sargent 2017). Presently, biomedical approaches, introduced through European imperialism and colonialism, coexist alongside Islamic healing, herbalism, ritual specialisms, evangelical healing, spirit possession beliefs, and other local health practices. A multitude of explanatory models of mental health are to be found across the different regions of the continent, varying among individuals, cultures, families, ethnicities, and countries, and are often shaped by cultural, social, and religious factors (Amuyunzu-Nyamongo 2013; Egbe et al. 2014). Also, in the region of East Africa this diversity of explanatory models is present, with common factors that can be found across settings, but evidently, also significant differences within the variety of explanatory models and settings (Ventevogel et al. 2013).

Within the context of this PhD-thesis, it would lead us too far (and would imply the risk to exoticize) to describe the particular and distinctive aspects of all local explanatory models. However, it is important to point out the commonalities found in several studies of differing East-African explanatory models of mental health, as these can be of significance when they are divergent from the dominant approach in the Belgian context. For instance, a general belief that mental health problems originate from various external causes, and the idea of continuity between life and death (Patel 1995). Mental health problems that are related to – in biomedical terms – psychotic or dissociative symptoms have been described to be associated with social and supernatural causes, such as ancestral influences, natural forces, witchcraft, spirit possession, evil spirits or divine punishment in several East-African settings (Amunga 2020; Atilola 2015; Monteiro 2015; Teferra and Shibre 2012; Verginer and Juen 2019). Mental health problems that do not have these symptoms (again, speaking in biomedical terms), are more often believed to be caused by psychosocial, financial, or biomedical issues (Ventevogel et al. 2013; Verginer and Juen 2019). Consequently, health problems that are not understood in regular biomedical terms, opposed to well-known 'biomedical' diseases such as malaria or tuberculosis, are rather associated with other causal explanations than considering mental health problems as a potential explanation (Mbwayo et al. 2013; Monteiro 2015; Ngoma, Prince, and Mann 2003). However, as mentioned before, explanatory models are dynamic and can change due to different factors (Dein 2003; Williams and Healy 2001). Different explanatory models can also be applied at the same instance. A study conducted in Uganda for instance, found that explanatory models of the participants were often spiritual in origin, but also recognized the biomedical model (Patel 1995). Another study, in Kenya, showed that in the language used by Kenyans to express mental suffering both local idioms, such as 'huzuni'(a Kiswhali

idiom that roughly can be translated as ‘sadness’ or ‘grief’) and global idioms, such as ‘stress’ and ‘depression’ were integrated (Mendenhall et al. 2019).

2.4.1.1 (Mental) healthcare use in East-Africa

How people perceive and understand mental health problems and the causes thereof, influences how they seek help for these problems. In many cases in East- Africa people do not seek treatment for mental health problems (Verginer and Juen 2019). If treatment is sought, mental health problems are first dealt with by the family, and if not resolved, treated by local and traditional practitioners (Monteiro 2015). Among those preferred practitioners are traditional healers, diviners, herbalists, religious leaders etc., and religious treatments, such as prayer or holy water treatments (Amuyunzu-Nyamongo 2013; Monteiro 2015; Teferra and Shibre 2012; Verginer and Juen 2019). Depending on the perceived cause of the health problem, people can choose one or several health practitioners to treat their illness, potentially combining different approaches on the same illness (Ojagbemi and Gureje 2021; Olsen and Sargent 2017; Patel 1995). Services of traditional healers are more often consulted when faced with symptoms that cannot be explained by common medical illnesses (Mbwayo et al. 2013; Ngoma et al. 2003; Sorketti, Zainal, and Habil 2013). Spiritual or religious treatment often involves fasting, praying for extended periods, and making various sacrifices and offerings, including monetary contributions, land or animals (Sorketti et al. 2013). Individuals with mental health problems are taken to churches and other religious establishments, such as temples and mosques, and sometimes reside there for extended periods in order to heal (Ventevogel et al. 2013). Often, the government health services are expected to only provide medical care and treatment for ‘other’ problems that can be found elsewhere (Muga and Jenkins 2008).

Cultural explanatory models can have both positive and negative impacts on mental health. On one side, it has been shown that the performance of cultural rituals can bring about peace and psychological contentment (Amunga 2020). Using treatment interventions rooted in African cultural concepts of disease may help to reduce stigma and promote the integration of individuals with mental health problems into community life (Ojagbemi and Gureje 2021). Studies indicate that social inclusion through becoming part of a religious or communal group, and adopting specific prayer routines can contribute to the process of recovery from traumatic experiences and generate a forward-thinking mindset (Otake and Tamming 2021; Williams and Healy 2001). On the other side, studies report a large stigma around mental health problems, especially those that are explained by supernatural forces (Egbe et al. 2014; Monteiro 2015; Ndetei et al. 2016). Individuals suffering with those illnesses often face a lack of empathy from their community and family members, leading to social exclusion, discrimination, and sometimes violations of their basic human rights (Bailey 2014; Kopinak 2015). Individuals suffering from mental health problems are seen as disturbances to society, resulting in their exclusion from social

events and community gatherings (Makanjuola et al. 2016). This can particularly affect women due to the belief that mental health problems greatly reduce their chances of marriage, especially if they have a personal or familial history of mental health problems (Amuyunzu-Nyamongo 2013). Additionally, young students known to have mental health problems are often kept separate from their peers, as they are believed to be contagious and likely to spread their illness (Ndetei et al. 2016). Furthermore, as mental health problems are believed to run in families, this leads to stigmatization and isolation of not only the affected individuals but also their immediate and extended family members within the community (Monteiro 2015).

Finding adequate mental healthcare is further complicated because of structural and systemic problems. Mental healthcare in Africa faces numerous challenges, including inadequate funding, a low priority and lack of clear mental health policy, a shortage of mental health facilities and trained professionals, the aforementioned pervasive stigma and discrimination against mental health patients and limited communication between psychiatric and primary care services (Essien and Asamoah 2020; Monteiro 2015; WHO 2022). Evidence-based mental health services as known in the Global North, are rather scarce in African countries (Essien and Asamoah 2020). Global mental health initiatives, such as WHO programs, try to install similar services in Africa, but often fail to incorporate the local context, where explanatory models of mental health with great importance of socio-cultural-spiritual factors are dominant (Monteiro 2015; Wondimagegn et al. 2023). As described above, local populations often favour non-medical and traditional healing services. However, the capacity of this traditional healthcare infrastructure has been compromised as a result of colonialism, segregation, and at times, destruction of the healthcare system (Monteiro 2015). Consequently, these traditional systems no longer have the capability to meet all the needs or effectively tackle the contemporary socio-economic problems that are causing mental health problems. Currently, there seems to be a huge gap in the provision of adequate systemic mental healthcare for African populations.

2.4.2 Inclusivity in mental healthcare in Belgium

Recent initiatives in the organization of Belgian mental healthcare indicate a promising shift towards a more holistic perspective, which can be beneficial for a more inclusive approach, taking into account the specific context of migrant patients. The Belgian mental healthcare system aims to transition from residential care to support in the home environment and from a medical model to a holistic biopsychosocial approach (Aga, Rowaert, and Vanderplasschen 2017; Mistiaen et al. 2019). The reform seeks to provide social and community-based support, prioritize the patient's needs, and involve family members and the informal network. Additionally, the Belgian Superior Health Council published an advisory report in 2019, in which they discourage the sole reliance on psychiatric diagnostic

classifications such as the DSM and ICD, advocating for a patient-centered approach based on clinical case formulations and taking the broader context into account (Gerard et al. 2019; Vanheule et al. 2019).

However, the implementation of this transition in the field is yet to be studied, and the Belgian mental healthcare system remains rather unfriendly for migrants. To start with, not all migrants have access to the mental healthcare system. Similar to other European countries, also in Belgium the access to mental healthcare for migrants is defined by their legal status. Irregular migrants have "minimum rights", which means that they are only entitled to mental healthcare if it is deemed 'emergent' by the official instances. For migrants within the asylum seeking process, the access to mental healthcare in Belgium is defined by their place of residence (Roberfroid et al. 2015). Asylum seekers residing in arrival centres only have access in case of emergency, the access for asylum seekers residing in Fedasil (i.e. the federal agency for the reception of asylum seekers) reception centres is decided by a psychosocial coordinator, and for asylum seekers residing in local reception initiatives or within their own network it is either decided by a general practitioner or in an informal way (Roberfroid et al. 2015). Once migrants are granted legal status to remain in the country, they are entitled to the same access to mental health services as national and resident EU citizens, which aligns with the requirements outlined in several European Union Directives (European Migration Network 2022). The organisation of mental health care for adults in Belgium is a rather complex puzzle[2], with shared responsibilities between the state and the different regions (Mistiaen et al. 2019). Access to mental healthcare is not regulated, patients may take the initiative themselves to consult a mental healthcare practitioner (which can be within a conventional service, or in private practices) or a mental health care centre (Delaruelle et al. 2022; Mistiaen et al. 2019; Samele, Frew, and Urquía 2013). Ideally, a patient is referred by a general practitioner (GP), as a (partial) reimbursement of their mental healthcare costs can then be received (Delaruelle et al. 2022; Gerkens and Merkur 2020).

2.4.2.1 Specific mental healthcare initiatives for migrants in Belgium?

In an overview of the Belgian mental healthcare organization for adults, specific services addressing migrants' mental health needs are described to be integrated within the different levels of the healthcare system (Mistiaen et al. 2019). For instance, at the level of 'informal community health care' - which does not deliver mental health care, but contributes to mental health - institutes such as the public centre for social welfare (Openbaar Centrum voor Maatschappelijk Welzijn – OCMW) are

[2] I will not elaborate upon the organisation of the Belgian mental health care system in this dissertation, a comprehensive and in-depth description can be found in the KCE-report 318, published by Mistiaen and colleagues in 2019.

supposed to have services specifically for migrants (Mistiaen et al. 2019). In primary care, services for migrants should be included in the services of the centres for general welfare (Centra voor Algemeen Welzijnswerk – CAW), and in the more specialized community mental health services and psychiatric services, programs targeting people with a migration background are described to be incorporated in general hospitals (Mistiaen et al. 2019).

Despite the existence of these dedicated mental health services for migrants on paper, numerous obstacles and challenges hinder the actual implementation of these services and Belgium does not have a general 'migrant-friendly' approach. Within these specialized mental health services for example, the specific programs for migrants mentioned are mainly targeting refugees, persons in exile or migrant children (Mistiaen et al. 2019). A recent report by the European Migration Network (EMN) (European Migration Network 2022) has shown that Belgium does not have a specific national strategy or policy that addresses migrants' mental health. A significant role in the offer of specialized migrant services in Belgium is played by non-governmental organizations (NGOs) and non-profit organisations (NPOs) (which is also the case in several other European Member States). Some of these organizations are part of the healthcare system, Solentra for instance, which is a transcultural psychiatric centre focusing on children and their families with complex trauma issues (Mistiaen et al. 2019). The involvement of these NGOs and NPOs ranges from offering intervention services, (free) counselling and psychotherapy, to providing information about accessing services within the public health system, offering training programs for healthcare institutions and professionals or developing guidelines. They also promote equal access to mental health services for vulnerable groups of migrants, including refugees and unaccompanied minors. It is important to highlight that, in line with descriptions within the KCE-report (Mistiaen et al. 2019), these NGOs are not easily accessible for migrants themselves. In conversations with people working at these NGOs, it became clear that they often operate on a referral basis from conventional health or social care providers such as the OCMW or CAW. Moreover, they might specifically target certain migrant groups, such as unaccompanied minors, individuals who have experienced torture, or migrants in transit. Additionally, their services may be limited to specific cities with sizable migrant populations, such as Brussels, Antwerp, or Ghent. Furthermore, it's worth noting that some NGOs or NPOs may only provide initial mental health aid and cannot ensure ongoing or continuous care. Services are thus scattered and do not serve the general population of migrants.

Migrant patients with a valid residence permit do have unregulated access to mental health specialists, and can receive a (partial) reimbursement of their mental healthcare costs if they have been referred by GPs (Delaruelle et al. 2022; Gerkens and Merkur 2020). It is thus essential that also general practitioners recognize potential mental health issues among migrants and effectively refer migrants towards more specialized, migrant-friendly services. Yet, it can be debated if these GPs have sufficient

knowledge on potential cultural influences to diagnose and refer migrant patients. Research has provided evidence that GPs may make suboptimal diagnostic, treatment, and referral decisions with migrant patients (Centola et al. 2021; Duveau et al. 2023). Amongst other reasons such as language barriers, this was also due to the influence of practitioners' behaviours and beliefs on their decision-making process. In specific Belgian studies (Delaruelle et al. 2022; Duveau et al. 2023; Lepièce et al. 2014), it was found that Belgian GPs displayed less favourable and discriminatory decision-making regarding mental health for migrant patients. GPs (unintentionally) perceived the symptoms of migrant patients as less severe compared to those of native patients, dedicated less time to examine the socio-relational history of their migrant patients, and prescribed more drugs. However, cultural competency training may alter GPs' attitudes in a positive way (Delaruelle et al. 2022).

More than ten years ago, an analysis by an expert group of Belgian healthcare providers had made several policy recommendations to address and reduce mental health inequalities among migrants and ethnic minorities in Belgian mental healthcare (Dauvrin et al. 2012). A recently follow-up report (Coune, Dauvrin, and Verrept 2020) does not paint a pretty picture: it raises the issues of an acute shortage of professional caregivers who can provide customized mental healthcare for people with a migrant background, and points to the specialized centres for migrants being overwhelmed and forced to turn away patients. Furthermore, the experts found that on the one hand, there is a lack of intercultural mediators and/or interpreters who speak the language of migrant patients, and on the other hand, there is also a shortage of financial resources for interpreters and intercultural mediation in specialized centres. Additionally, the continuity of care for this target group often presents problems, resulting in the number of compulsory hospitalizations being twice as high among migrants and individuals from ethnic minorities as compared to the Belgian population (Lorant et al. 2007). Belgian healthcare is lacking initiative to develop a coherent and inclusive mental healthcare, which leaves migrants to experience multiple barriers previously discussed (European Migration Network 2022). In comparison, other European Member States are doing more effort, for instance by developing national health programs with the participation of migrants and including mental health within their integration policies.

CHAPTER 3: METHODOLOGY

In this third chapter, I outline the methodological approach of my PhD-research, detailing the study design, data collection and analysis. I start off with a discussion of the study setting in which my research took place. In the subsequent sections, I move into explaining the research design, the participant recruitment and how data collection and data analysis were conducted. I conclude this chapter with a reflexive discussion on my position as a researcher.

My focus in this chapter is on the qualitative empirical research conducted involving both migrant and professional participants. The methodology applied in the fourth paper, a scoping review that has been conducted according the Arksey and O'Malley's multistage methodological framework (Arksey and O'Malley 2005) incorporating Levac et al.'s (2010) refinements, is meticulously explained within the article itself. Therefore I refer to the methodology section of the article itself, which can be found in the results chapter.

3.1 Study setting

3.1.1 East-African migrants in Belgium

East-African migrants make up a significant and growing part of the Belgian population, with the largest population coming from the Democratic Republic of Congo (Demart et al. 2017; Myria Federaal Migratiecentrum 2022). In 2021, two percent of the people migrating to Belgium came from East Africa, with the largest group coming from DR Congo (StatBel 2022). Of the total Belgian population, 0.9% have an East-African nationality, 1.1% are born in an East-African country, and 1.3% have one or two parents with an East-African country of birth (StatBel 2022). People with an African background who migrate to Belgium often settle permanently (Demart et al. 2017). For instance, in 2021, 2.6% of all people who have a first foreign nationality were from DR Congo, 66.6% of them acquired a Belgian nationality (Myria Federaal Migratiecentrum 2022). It is important to recognize that the experiences of East-African migrants in Belgium are diverse and shaped by individual circumstances, including factors such as education, language skills, socioeconomic background, and the specific reasons for migration. The composition and characteristics of the East-African communities in Belgium have evolved over time, reflecting both historical and contemporary migration trends.

The history of East-African migration to Belgium is marked by different waves and contexts that have shaped the presence of East-African individuals and communities in the country. During the colonial era, Belgium's colonization of the Congo and Ruanda-Urundi (which later became Rwanda-Burundi) created initial connections between East Africa and Belgium. However, the movement of people from Africa to

Belgium at that time was rather minimal, and only involved special social groups such as children from both Belgian and African inhabitants (Demart et al. 2017). This changed following the independence of various East African countries after 1960. At first, people from the former colonies, mostly Congolese, sought educational and employment opportunities in Belgium (Demart et al. 2017; Grégoire 2010). People came to study, work or travel in Belgium, and had the intention to return to their countries of origin (Kagné and Martiniello 2001; Schoonvaere 2010). However, unrest and unstable political and economic situations that arose in the aftermath of the independence of the former colonial countries, forced several refugees to flee to Belgium (Demart and Bodeux 2013; Grégoire 2010; Kagné and Martiniello 2001). The Belgian government tried to lower the immigration numbers in 1975-1980 and people mainly migrated within the context of family reunification (Schoonvaere and Perrin 2010). Later, from 1984 to 2000, migration to Belgium increased and the country became a destination for individuals fleeing conflicts and seeking asylum (Schoonvaere and Perrin 2010). East-Africans have sought refuge in Belgium due to political instability, ethnic tensions, and civil wars in their home countries, such as Rwandan refugees during and after the 1994 genocide and individuals escaping violence in the Great Lakes region (Demart et al. 2017). In more recent years, migration numbers from people coming from several 'new' East-African origin countries such as Eritrea, Sudan and Somalia increased (Demart et al. 2017; Myria Federaal Migratiecentrum 2022; Noppe et al. 2018). These people do not necessarily choose Belgium as a final destination, but end up there due to several circumstances along their migration journey. For example, young Eritreans who seek a better future in Europe, forced by the economic situation, national service rules and difficult living circumstances in their country of origin (Belloni 2019). Belgium's family reunification and immigration policies have also influenced East-African migration (Demart et al. 2017; Myria Federaal Migratiecentrum 2022; Noppe et al. 2018). Individuals who have already established themselves in Belgium often sponsor their family members to join them, contributing to the growth of East-African communities in the country.

3.1.2 East-African migrants' mental health in Belgium

In addition to the impact of social determinants related to migration, research indicates that individuals from African migrant groups are particularly vulnerable to developing mental health problems. This increased vulnerability can be attributed to the specific social and migration-related stressors they face, including higher levels of discrimination and racism, unemployment, and precarious living conditions (Centrum voor gelijkheid van kansen en voor racismebestrijding 2011; Demart et al. 2017; Tortelli et al. 2014). The combination of their often difficult migration paths and precarious living situation in the countries of destination render them among the most vulnerable groups for developing mental health problems (Pannetier et al. 2017). However, there is little information on the presence of East-African

migrants in the Belgian healthcare system. The lack of systematic collection of ethnicity data and privacy regulations in Belgian mental healthcare makes it challenging to obtain precise numbers on individuals of East-African descent receiving mental health treatment. In one specific type of mental health facility in Flanders, the Centres for Mental Health Care (Centra voor Geestelijke Gezondheidszorg), patient nationality is recorded. Although data disaggregated by individual countries is unavailable, it has been communicated to me that individuals with an African background (excluding Morocco) comprise less than 0.5% of all patients in this facility (e-mail communication Zorg en Gezondheid 9th of July 2021). This limited amount of information, coupled with the scattered literature on this topic in Belgium, suggests the presence of a treatment gap in mental healthcare, i.e. the gap between the real prevalence of persons suffering from mental conditions and those who get an effective treatment (Ceuterick et al. 2020; Meys, Hermans, and Van Audenhove 2014).

3.2 Study design

An individual's understanding of mental health is multifaceted and can be influenced by their cultural context (Amuyunzu-Nyamongo 2013; McCann 2016). Given the recognition of this subjective nature of reality and the importance of understanding personal experiences, this study adopts a constructionist epistemological perspective (Byrne 2022). Within this perspective, meaning and experience are considered as socially constructed, and knowledge is developed through interpretation of these subjective constructs. To ensure a comprehensive exploration of the research topics, a qualitative study design was chosen. Qualitative research serves as a valuable tool for gaining a deep understanding of individuals' real-life experiences, particularly within the context of mental health-related phenomena (Teferra and Shibre 2012). It is by using qualitative methods that the meanings and ways of interpretation within a cultural system of knowledge and practice can be uncovered (Kirmayer and Ban 2013). Within this study, an interpretative, interview-based research study design was employed to gain a complete understanding of the perceptions and experiences of both East-African migrants and professionals. Individual in-depth interviews, using a semi-structured format, were considered the best-suited methodology to generate a comprehensive, thorough exploration on the study topic (Denzin and Lincoln 2011).

3.3 Participant selection

For both groups, a purposive recruitment procedure was applied, selecting participants based on a specific criteria. To identify and get access to potential participants, I applied a snowball sampling technique. In both the migrant and professional groups, I asked participants if they could provide me with contact details of other potential participants. Getting access to these groups of people requires a trusted connection or knowledge on specific criteria of people, which was facilitated using the

snowballing technique (e.g. among East African migrants to identify those we are first generation migrants, or with professionals those that often work with sub-Saharan African migrants).

3.3.1 East-African migrant participants

I recruited a community sample of East African migrants to gather a rich variety in experiences and perceptions, and gain insights in their explanatory models of mental health. Potential interview candidates were purposively selected using a snowballing technique via key organisations, gatekeepers, and informal contacts within both my professional and personal networks. The criteria for the purposive selection were (1) to be a first-generation migrant, (2) of East-African descent (i.e., Burundi, DRCongo, Djibouti, Eritrea, Ethiopia, Kenya, Uganda, Rwanda, Somalia, and Tanzania), and (3) over 18 years old. In addition, knowledge on or interaction with the Belgian mental healthcare system was not a specific criterium. Some of the participants had, either directly or indirectly, interacted with the mental healthcare system, a large part of them did not. For example, this included a participant whose young adult child was admitted to a psychiatric ward, another participant who took the initiative to begin mental health therapy in Belgium, and yet another participant who was recommended to a psychologist by a GP but chose not to continue with the treatment after the initial session. This approach provided an opportunity to explore how contact with the mental healthcare system might have impacted the understanding of mental health, without being a primary focus of the study. Candidates were contacted through e-mail or telephone and invited to participate in the research. The aim was to attain a group of participants who reflected the general population of East-African migrants in Belgium representing the diverse countries of origin, as well as migration trajectories. It was equally important to recruit a balanced sample in terms of gender, age, and length of stay in Belgium to be able to identify the commonalities, as well as potential differences in explanatory models along these different characteristics. After conducting about 26 interviews with a diverse group of participants representing different countries of origin, gender, age, and length of stay, it became evident that no relevant or new information, crucial for addressing my research objectives, was emerging—indicating data saturation. Continuing with the originally scheduled interviews, and considering that subsequent interviews also did not yield additional insights, the recruitment process was stopped.

3.3.2 Professional participants

I selected professional participants according to their professional position: they either worked in the Belgian healthcare sector and had members of the sub-Saharan African community in Belgium as their patients, or worked in Belgian civil society organisations dedicated to supporting sub-Saharan African migrants in navigating the healthcare system. Informal (mental) health practitioners, such as volunteers,

healers or priests, were not included. The aim was to recruit a balanced sample in terms of cultural background of the professional participants to study differences in explanatory models of mental health among the professionals and the influence thereof. Hence, I selected both professionals of sub-Saharan African and Western-European descent. I used different entries in (mental) healthcare organisations, institutional affiliations and civil society organisations, as well as in my personal networks. Candidates were contacted with an invitation to share their individual stories on the topic or with a question to spread the inquiry within their own network. Through further snowball sampling rounds, more participants were recruited until data saturation was reached and no further insights were gained in a subsequent interview.

3.4 Participants characteristics

I conducted in-depth interviews with 30 first-generation East-African migrants and 22 healthcare professionals. In the following, I provide an overview of the participants' profiles.

3.4.1 East-African migrant participants

I included a total of 30 East-African migrant participants, consisting of 16 women and 14 men. Their ages ranged from 21 to 65, with a median age of 37.5 years. The participants were from Burundi, DR Congo, Djibouti, Eritrea, Ethiopia, Kenya, Rwanda, Somalia, Tanzania, and Uganda, and had varying durations of living in Belgium, with a median of 6 years. Of these participants, 20 had temporary residence status, while two arrived through family reunification, and seven had permanent residency. Regarding education, 16 participants had completed higher education, 12 had attended secondary school, and one lacked formal education. Seven participants were unemployed or unable to work, 13 participants were employed, 9 were studying, and one participant was retired. Nearly all participants identified as religious, with 29 indicating the importance of religiosity with an average score of 8.8 on a scale of 1 to 10, indicating a high level of importance or religiosity, which is important when interpreting the results. In the tables below, a few more detailed characteristics of the migrant participants can be found. However, to ensure privacy and anonymity, I do not provide a full table with characteristics per participant.

Figure 1. Countries of origin migrant participants

	Male participants	Female participants
Age range		
20-30	4	3
30-40	5	3
40-50	3	6
50-60	1	4
60-70	1	/
Country of birth		
Burundi	3	1
DR Congo	4	/
Djibouti	/	1
Eritrea	2	/
Ethiopia	1	1
Kenya	/	1
Rwanda	1	3
Somalia	/	3
Tanzania	1	3
Uganda	2	3
Residence status		
Recognized refugee/ subsidiary protection (5 year residency)	5	7
Student (temporary study permit)	4	3

	Other temporary residency	1	/
	Residency obtained through family reunification (temporary residency)	1	1
	Permanent residency	1	/
	Nationality acquired	1	5
	Unknown	1	/
Length of stay in Belgium (in years)			
	<5	7	5
	5-<10	3	5
	10-<15	2	1
	15-<20	1	1
	20 or longer	1	4
Total		14	16

Table 1. Age range, country of birth, residence status and length of stay of migrant participants, by gender

3.4.2 Professional participants

I interviewed a wide range of professionals in terms of gender, age, professional and migration background. In total, 22 participants were involved in the study. Of them, 16 were individually interviewed and, on their request, one focus group discussion was held with six participants from the same mental health organisation. Seven participants worked in the regular healthcare system either as general practitioner (GP), as health-promoting professional in primary care or as psychologist or psychiatrist in specialist care. Fifteen participants worked in civil society organisations (CSO) or state-funded projects that provide support for socially vulnerable people or people with a migration background, and with (specific) healthcare issues. Seventeen participants were more than five years active in the healthcare sector. Eleven participants (of which all focus group discussion participants) were female. Twelve participants did not have a migration background, ten participants were of SSA descent with origins in Burundi, Cameroon, Congo, Ghana, Kenya, Rwanda and Uganda. Nine of them were first-generation migrants and one a second-generation migrant.

3.5 Data collection

3.5.1 A note on Covid-19

I started my PhD-research at the end of 2019, with the intention of employing a participatory research design, using creative methods such as photovoicing (Han and Oliffe 2016), and interactive group discussions. While I was familiarising myself with the state of the art of the literature and developing the research design, the initial reports of a rapidly spreading virus began to emerge worldwide. By the

time I was preparing to start the initial recruitment for data collection from the East-African migrant community, Belgium had already implemented stringent lockdown measures. At that time, it was unclear how long the measurements would be in force. Realizing that the situation would not resolve quickly, I decided to postpone my data collection with the migrant participants. Instead, I turned my focus towards conducting in-depth interviews with professionals, because these could be happening online. While this strategy did not allow me to build on the data that I collected with the migrant participants (which was my initial plan), it enabled me to proceed with my PhD-research without significant time loss. Unfortunately, the virus persisted and led to subsequent waves of measurements. With ongoing limitations on in-person meetings in groups, I had to revise my participatory research design, adopting the methodology to individual in-depth interviews to gather data. Although I am confident that the collected data is highly informative, I regret not being able to employ a community-based participatory approach, which I believed could have added an interesting layer of depth to the findings.

3.5.2 Data collection tools

I developed separate semi-structured interview guides for both participant groups, which can be found in appendices 1 and 2. I initiated the development of both interview guides with a review of relevant literature, to identify central themes, concepts and important areas of exploration related to my research objectives. While both interview guides were semi-structured in nature, they were slightly distinct in level of structuring. The interview guide tailored for migrant participants had a more rigid structure as the central questions were drawn upon pre-existing questionnaires to elicit insights into various aspects of their explanatory models of mental health. This required sometimes more direct questions or illustrative examples to fully grasp their perspectives. The interview guide for the professional participant group contained more open-ended and questions, allowing for a diverse range of responses, given the participants' varied professional backgrounds and educational experiences. Especially in the second part of the interview guide for professionals, comprised open questions on themes derived from literature, such as their view on differences between individualist and collectivist cultures and implications for healthcare.

I created three versions of the interview guides according to the languages spoken by the participants and myself: Dutch, English and French. During the development of the interview guides, these were discussed with my supervisors, colleagues and representatives of the migrant communities. I did not adapt the interview guides during the data collection or based on previous findings within or between the participant groups.

The interview guide for the migrant participants started with three fictional scenarios to open the conversation and familiarise the participant with the research purpose. In these scenarios, potential psychological issues were described, probing for the interviewees' personal interpretation and solution of the described situation. In a subsequent section, I asked questions to elicit community perceptions on mental health and potential differences with Belgian perceptions. For these central questions in the topic guide, I drew additional inspiration from two instruments: the Explanatory Model Interview Catalogue (EMIC) (Weiss 1997) and the Cultural Formulation Interview (CFI) of the Diagnostic and Statistical Manual for Psychiatric Disorders' fifth edition (American Psychiatric Association 2013; Jarvis et al. 2020). Both tools aim to assess the cultural beliefs and practices associated with (mental) illnesses, in either research (EMIC) or clinical (CFI) context. The EMIC is developed as a semi-structured interview guide on illness presentations, and the CFI as an assisting tool for diagnosis in a psychiatric encounter with open questions. I did not use them in their entirety, but chose to pick questions, themes and ideas to build my own interview guide upon. I took critical discussions of these tools into account, for example the fact that both tools take culture and explanatory models as static concepts (Rodgers 2012; Williams and Healy 2001). I have added and adapted questions to direct the data collection to answer my specific research objectives. For example, I have added a section on how participants felt how moving to Belgium changed their perceptions about health and illness, with a particular focus on mental health. Additionally, I developed a sociodemographic questionnaire, drawing inspiration from a similar questionnaire previously designed and tested by my colleagues at CeMIS (Centre for Migration and Intercultural Studies, University of Antwerp) in the context of prior research. This questionnaire can be found in appendix 3.

The interview guide developed for professionals contained questions on the interviewee's background, their perspectives on their own and their patients' explanatory models of (mental) health, potential disparities between these models, and their approaches to handling such disparities in their professional practice. Initially, my plan was to conduct the interviews with professionals following the data collection from migrant participants, allowing me to examine whether the explanatory models of mental health among migrants persisted when they sought healthcare and how professionals perceived these models. However, due to Covid-19, I changed the order of my data collection. Consequently, I formulated questions based on insights derived from literature that highlighted differences in explanatory models between these two groups. For instance, I inquired about their opinions on the separation of the body and mind and their experiences with their migrant patients' perspectives on this distinction.

3.5.3 Obtaining consent and ethical approval

The study was ethically approved by the Ethics Committee for the Social Sciences and Humanities of the University of Antwerp (SHW_20_48). Data collection procedures were in accordance with the ethical standards at the University of Antwerp. All participants received an informed consent form prior to the interview, in person or through email in the case of online interviews. This document, adapted from the standardized template from the University of Antwerp, outlined the study's purpose, associated risks, and provided the researcher's contact details. Before obtaining consent, extensive explanations of the aim and process of the research were given and potential questions were answered. All participants were informed that they could pause, postpone or stop the interview at any time. In the online interviews with professionals, oral consent was obtained prior to the interview, in the in-person interviews, written consent was obtained.

I conducted all the interviews personally. All interviews with the migrant participants were held in person at a place chosen by the participant, to ensure the feeling of confidentiality and trust among the interviewees. Before starting the interview, migrants participants filled out a socio-demographic form. No names, addresses, telephone numbers or any other identifiable personal information was asked in these forms. The information from these forms was stored separately and results are only shared or made publicly in an aggregated manner, to protect the anonymity of the participants. With professional participants, the interview started with a question on their professional and personal migration background. After consent was obtained, the interviews were audio-recorded, except for one interview with a migrant participant that preferred not to be recorded. In this specific case, detailed interview notes were taken. In the case of the migrant participants, given the sensitivity of the topics discussed, I ensured that they could contact me at any time, in case they felt any discomfort in the aftermath of the interviews. Additionally, I provided them with a contact sheet with information on supportive and (mental) health services, in case they felt the need for professional support.

All interviews were transcribed by myself in a pseudonymized manner, and after these transcriptions, the recordings were removed and deleted. Data analysis was performed on the pseudonymized transcripts, which were only used for this PhD-research and not for any other purposes.

3.5.4 Conducting the interviews

I conducted all interviews, allowing for consistency in interview methodology. The interviews took place between June-October 2020 in case of the professionals, and between June – December 2021 with the East African migrant participants. Interviews with both professional and migrant participants were conducted in Dutch, French or English, according to the preference of the interviewee. Since the

research was carried out during the Covid-19 pandemic, preventive measurements impeded physical meetings at certain periods of time. With the migrant participants, I postponed or scheduled interviews so that they could take place in person. I believe this was essential in obtaining rich data, given that the interview objectives could touch upon sensitive topics. With the professional participants, sixteen interviews were conducted online through a platform of preference of the interviewee (Zoom, Jitsi Meet, Skype). In addition, one group discussion took place with six members of one institutional team of mental health professionals, due to lack of time and organizational issues. For this particular discussion, I adapted the interview topic guide to the group situation, covering the same topics. Within the interviews, I did not apply the interview guides rigorously, but opted to apply it in a flexible manner, as this can allows for a natural and flexible conversation to emerge (Denzin and Lincoln 2011).

I exercised utmost caution throughout the interview to not apply biomedical clinical concepts of mental health but use general wording such as 'feeling well', 'being healthy', 'worrying', etc., or referring to the aforementioned scenarios, to avoid a biased interpretation or social desirability to conform to a biopsychosocial view on mental health.

3.6 Data coding and analysis

To analyse data, I applied a reflexive thematic analysis with an experiential orientation, i.e. to grasp the meaning given by the participants to a certain phenomenon or concept (Braun and Clarke 2006; Byrne 2022). Analysis was conducted using a data-driven approach (Byrne 2022). I coded and analysed the data, applying the six-phase thematic analytical process in a flexible manner. The transcripts from the migrant and professional participants were first analysed separately following the same strategy, and in the context of article 3, triangulated to provide an answer to the third research objective. In what follows, the coding process is explained, using the example of the interviews with migrant participants.

In a first step, familiarisation with the data was achieved through the verbatim transcription of the audiotaped interviews. The transcripts were imported in the qualitative data analysis software, NVivo 12. During the second step, initial codes such as “cultural differences” or “mental health conceptualisation”, etc., were generated inductively. In this step, I aimed to identify commonalities and discrepancies in the narratives of the participants, starting from the data without a predefined theoretical framework or impose pre-existing ideas. Topics were identified on the basis of the general interview sections, such as ‘health’ or ‘life in Belgium’, and recurring topics in the participants’ narratives, such as ‘religion’ or ‘gender’. Through a process of reading and reviewing the data, identifying recurring content and collating codes, a first version of a data-driven codebook with themes was developed. Applying a reflexive approach, interpretations of the data and themes were explored and discussed with one of my supervisors, Lore Van Praag, throughout the analytical process. Our aim

was to reach richer understandings of the data and to resolve any potential inconsistencies (Byrne 2022). To answer each different research objective, the initial version of the codebook was further refined in an iterative process, resulting in separate detailed codebooks to align with each specific research aim. Repeating steps 4 and 5 of the thematic analysis framework, i.e. reviewing, defining and naming themes, further (sub)-themes emerged from the coded extracts, guided by the research questions. For instance, to understand the migrant participants' causal attributions within their explanatory model of mental health, codes were structured in a thematic order: 'health' > 'mental health' > 'causes of mental health problems'. Using the specific technological features of NVivo 12, e.g. the 'memo links' or 'case classifications', further data analysis was supported to formulate potential relationships between themes or make comparisons between participant groups, e.g. those migrant participants who were recently arrived in Belgium and those who acquired the Belgian nationality, or between young participants and those of older age. The process of step 6, i.e. the writing up of the results, was reiterated for the individual scientific articles as well as this dissertation, summarizing the results, integrating an analytical narrative with data excerpts, and placing the analysis within the context of existing literature.

3.7 Positionality and reflexivity

A researcher inevitably brings their background into the field. Factors, such as gender, cultural background, educational upbringing, socio-economic position, all play a role in how research is conducted, as well as in how it is received by participants and the wider public. A researcher's identity, ideas, views and experiences influence the identification of the research topic, the definition of the research question, how data collection is conducted, the approach to data analysis and so forth (Lazard and McAvoy 2020). With a background in anthropology and an analytical attitude, reflecting on my positionality within the research has become a natural reflex. I believe that acknowledging and critically examining my own identity and its impact on the research is an essential part of conducting research with integrity (Lazard and McAvoy 2020; Wray and Bartholomew 2014). Therefore, I find it crucial to reflect on my position and research approach to enhance the transparency and validity of my research, which is also inherent to a reflexive data analysis (Carling, Erdal, and Ezzati 2014; Manohar et al. 2017; Wray and Bartholomew 2014).

The identification of my research topic and objectives has been guided by my personal interests and educational background. Through my studies in psychology and anthropology, I realized that the taught perspectives on mental health are one-sided and hardly questioned. Diverse cultural views are often excluded or marginalized, lacking evidence-based recognition. This realization drove my interest in exploring how neglecting this diversity affects individuals facing mental health challenges and

potentially contributes to worsening these challenges. As societies grow more diverse and societal issues contribute to mental health problems, it is essential to provide the best possible help to every individual. Neglecting the potential benefits of incorporating diverse approaches, such as involving religious healers in treatment, seems unnecessary. Furthermore, a case study during my master's thesis fieldwork highlighted the healing power of community belonging. Learning from such examples and integrating them into our understanding of mental health and healthcare seems very valuable to me. Unfortunately, this happens very rarely, and education in (mental) health sciences often lack attention to these matters. Hence, my research direction might also stem from my frustration and a personal drive to address this gap and advocate for the inclusion of diverse perspectives in Belgian healthcare. I might have carried certain assumptions and perspectives with me that could have influenced the questions I posed or the way I interpreted responses. While it is impossible to truly consider the impact of my positionality on the findings, I aimed to counter and minimize the impact by applying my educational background in psychological and psychiatric anthropology, as well as previous professional experience with the topic and with qualitative research. By critically examining my role as an interviewer and its implications, I address potential biases and consider how these might have shaped the research findings.

An aspect of significant importance in this field, especially during data collection with migrant participants, is the influence of my cultural background and skin colour. George Floyd's tragic death and the Black Lives Matter movement, which highlighted injustices related to skin colour, occurred during my research. This debate, though often painful, is essential. The discourse on the relationship between white and black individuals worldwide prompted me to question whether I, as a white researcher, should conduct this kind of research. Belgium's colonial history and power dynamics add complexity to my origin and skin colour. The fact that I am a white Belgian female conducting research in a black community, cannot be ignored. I have been asked if I am the best-placed researcher to answer my research question, considering I am not part of the community. I have asked myself this question numerous times and still do not have a definitive answer. At times, I believe my position facilitates an "etic view" (Fernando 2012; Ventevogel et al. 2013), an outsider's perspective that draws on theories and literature. However, I also wonder if I might be "too etic," too distant from the community, and through my position as the researcher could have unintentionally reinforced power dynamics between white and black individuals. Nonetheless, I firmly believe that my research objectives oppose these power dynamics and hope I have been able to also communicate this to my research participants. With my research, I question the ethnocentric approach in mental healthcare that predominantly imposes a Global North-perspective on mental health (Fernando 2002; Patel 1995). My intention is to highlight other explanatory models and their relevance in Belgian healthcare. Additionally, the research uncovers

the adverse effects of these power dynamics, as participants point to issues within the Belgian reception and integration system, which fuel social exclusion, discrimination, and racism. Instead of reinforcing the power dynamics, I sincerely hope that my research contributes to addressing those dynamics. The positive feedback from migrant participants, who felt heard and understood, reinforces my belief in the necessity and relevance of this research. I also believe that my previous professional experience with the topic, methodology as well as the population of interest may have mitigated the power differential. My thoughtful consideration of the ethical principles (see the description above) were also implemented to reduce the potential power dynamics. However, I regret that the covid-19 crisis prevented a participatory, community-based research that could further enhance validity and invert power dynamics. Future research should ideally include community researchers to reduce biases and cultural lenses that influence results (Ghane, Kolk, and Emmelkamp 2010).

Yet, I do not want to remain stuck in the dual thinking that skin colour and cultural background determines the insider or outsider status (Carling et al. 2014; Wray and Bartholomew 2014). While being seen as a cultural insider can foster a trusting relationship with research participants, being an outsider can also gain unique insights (Manohar et al. 2017). Outsiders start from the unknowing position and might want to get a more detailed and closer account; informants may elaborate more on topics they perceive the researcher to be unfamiliar with, enriching data (Manohar et al. 2017; Straiton, Ledesma, and Donnelly 2018). This dual insider-outsider reasoning on the basis of skin colour and cultural background also neglects the fact that identities are intersectional, and other characteristics may also impact research (Carling et al. 2014; Wray and Bartholomew 2014). Maybe the fact that I am a woman, or I am of younger age than some of my participants, had a more significant impact during data collection than my skin colour.

Also, during data analysis, my identity and position as a researcher remained significant. As described before, I applied a "reflexive" thematic approach. The ‘reflexivity’ in the approach indicates that the researcher is actively engaged in the process and acknowledges their own role, biases, and perspectives that might influence the analysis. Evidently, I strive for neutrality, but recognize the risk of unintentional bias and cultural influence (Ghane et al. 2010). I aim to illustrate different cultural perspectives on mental health and advocate for inclusive healthcare. Moreover, in the light of the societal discussions on health inequalities, I want to contribute to the research on social determinants and advocate for policymakers to tackle these. I acknowledge that my research's societal impact might be limited due to its scale. However, I view my research as a case study that could inspire larger-scale studies. Replicating and reproducing this research could emphasize the need for culturally diverse perspectives in mental health.

CHAPTER 4: RESULTS

4.1 **Article 1:** "God is my psychologist": How explanatory models of mental health influence healthcare-seeking behaviour among first generation East-African migrants in Belgium

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4.1.1 Abstract

Migrants are particularly vulnerable to mental health problems, but evidence shows that they are also more reluctant to seek mental health services than non-migrants. Explanatory models of mental health are culturally and socially defined and influence mental healthcare-seeking behaviour. This qualitative study explores the explanatory models of mental health among first-generation East-African migrants in Belgium and how these models influence their mental healthcare-seeking behaviour. Thirty in-depth interviews were conducted and analysed using a reflexive, thematic approach. Results show that participants perceived discrepancies in how mental health is conceptualised between people from their region of origin and from the dominant society. In their cultures of origin, impaired mental health is associated with 'craziness', and causes are rather sought in social, religious, or supernatural contexts. Participants also experienced differences in the openness to discuss mental health. Most participants' health-care seeking behaviour relied on informal social and religious support systems. This was largely shaped by previous experiences in their countries of origin, to which they held on and thus did not seek conventional mental healthcare. Participants who were more familiar with the prevailing explanatory models within Belgium, were more likely to use conventional mental health services. A better understanding of such explanatory models may inform components of culturally competent mental health care practice, better addressing migrants' mental health needs.

4.1.2 Introduction

While a wide range of evidence proves migrants are more vulnerable to mental health problems than non-migrants (Turrini et al. 2017, Uphoff et al. 2020, Voglino et al. 2022), migrants are more reluctant to seek mental healthcare in conventional healthcare services (Boukpessi 2021; Kirmayer et al. 2007; Knipscheer and Kleber 2008). This reluctance can be explained by a complex interplay of socio-demographic factors (e.g., gender, age, education), socio-economic factors (e.g., financial barriers, limited access to health insurance), structural and logistical factors (e.g., legal status defining healthcare

access, language barriers, system of consultancy appointments) and sociocultural factors (Ahmadinia et al. 2022; Anthony 2015; Kirmayer et al. 2007; Scheppers et al. 2006; Selkirk et al. 2014). Sociocultural barriers to conventional mental healthcare services are potentially embedded in differences in the explanatory models of illnesses (Kleinman et al. 1978) between migrants and the dominant society. Explanatory models are culturally and socially defined and describe how people "*ascribe meanings to symptoms, evolve causal attributions and express suitable expectations of treatment and related outcomes*" (Dinos et al. 2017, p. 106). What it may mean to be mentally (un)healthy may thus be understood differently in diverse cultural contexts (Amuyunzu-Nyamongo 2013; Choudhry et al. 2016; McCann 2016). These socially and culturally determined beliefs influence also how people navigate in the healthcare system (Fauk et al. 2021; Priebe et al. 2016).

Available literature shows discrepancies in general explanatory models of mental health dominant in different cultural societies. Many authors mention differences in explanatory models of mental illness among migrants compared to non-migrants in the Global North (Lindert et al. 2008; Priebe et al. 2016; Sandhu et al. 2013). Within many countries in the Global North, the biopsychosocial model prevails in the conventional mental health care system, and thereby mainly focusses on individualised experiences caused by predominantly biological or psychosocial factors. This contrasts with the attention for social, supernatural and religious factors in collectivist cultures (Fernando 2002; Gopalkrishnan 2018; Grupp et al. 2018; Priebe et al. 2016; Teferra and Shibre 2012). The latter may imply a preference for indigenous practices of healing rather than those provided by formal healthcare institutions (Teferra and Shibre 2012).

Explanatory models are, however, not a definite set of beliefs but rather a dynamic concept in which different explanations can co-exist and are influenced by social contexts (Kirmayer and Bhugra 2009; Williams and Healy 2001). When people migrate from one cultural context to another, this can impact their explanatory model of mental illness and influence their treatment-seeking behaviour and attitudes towards treatment, healthcare systems, and practitioners (Gopalkrishnan and Babacan 2015; Priebe et al. 2016). Understanding explanatory models of mental illness and related healthcare-seeking behaviour among immigrant populations is thus essential to reach and include these population groups in healthcare services (Choudhry et al. 2016; Issack 2015).

Empirical research to explore the views and expectations of specific migrant populations on mental health is indispensable to provide culturally appropriate treatment (Fauk et al. 2022; Knipscheer and Kleber 2008; Linney et al. 2020). This coincides with prevailing concerns about ethnic and racial inequalities in access to mental healthcare, institutionalised racism, and racial stereotyping in health care, which have led to the pathologisation of culture and culturally adaptive behaviours. It has

therefore been suggested that a deeper understanding of such explanatory models could contribute to culturally competent practice (Dinos et al. 2017). The identification of social and integration-related factors within the migration process that potentially influence views and expectations on mental health and, therefore, healthcare-seeking behaviour, can inform healthcare interventions to better serve these at-risk populations (Knipscheer and Kleber 2008). Previous research has indeed illustrated that adapting mental health services to address cultural needs yields better utilisation rates and outcomes for ethnic cultural minority groups (Said, Boardman, and Kidd 2021). However, research that specifically describes the healthcare-seeking behaviour and healthcare services used by African migrants is limited (Issack 2015), especially considering the influence of their explanatory models of mental health upon this behaviour.

The current study aims to fill this gap by assessing in an in depth manner the explanatory models of mental health among first-generation East-African (EA) migrants in Belgium and how these relate to their (mental) healthcare-seeking behaviour. The focus on EA-migrants is particularly relevant for several reasons. First, EA-migrants make up a significant and growing part of the Belgian population (Demart et al. 2017), with most members coming from those countries with a Belgian colonial history, i.e., DR Congo, Rwanda, and Burundi (StatBel 2022). People with an African background who migrate to Belgium often settle permanently (Demart et al. 2017). Second, evidence shows that migrant groups of African descent are more often confronted with diverse forms of racism and discrimination (Centrum voor gelijkheid van kansen en voor racismebestrijding 2011; Demart et al. 2017; Tortelli et al. 2014). The combination of their often difficult migration paths and precarious living situation in countries of destination render them vulnerable for developing mental health problems (Pannetier et al. 2017).

This article aims to answer the following research questions: (1) What discrepancies do EA-migrants perceive between the dominant explanatory model of (mental) health in their country of origin and in Belgium? (2) How do these explanatory models of (mental) health influence EA-migrants their (mental) healthcare-seeking behaviour?

4.1.3 Methods

Study design

We applied an interpretative, qualitative research study design from an experiential theoretical orientation, interpreting meaning and experiences explored through 30 in-depth interviews (IDI).

Participant selection

To gain a comprehensive understanding on the topic of the study, we recruited a nonclinical, community sample of EA-migrants. Candidates were purposively selected using a snowballing technique via key organisations, gatekeepers, and informal contacts within the authors' professional and personal networks. The selection criteria were to be a first-generation immigrant of East-African descent (i.e., Burundi, Congo DR Congo, Djibouti, Eritrea, Ethiopia, Kenya, Uganda, Rwanda, Somalia, and Tanzania) and over 18 years old. The sampling objectives were to keep a balance in terms of gender, age, and length of stay in Belgium to allow comparisons across these factors. Recruitment was stopped when data saturation was reached, i.e. when additional data collection did not longer significantly add new insights to a thorough understanding of our research topic.

Data collection

Data collection took place in June – December 2021. We considered IDIs as the best-suited methodology to generate a comprehensive, thorough exploration on the study topic (Denzin and Lincoln 2011). Using an open-ended interview topic guide, the first author conducted all interviews in person at a place chosen by the participant to ensure the feeling of confidentiality and trust among the interviewees. At the same time, this approach guaranteed consistency in interview methodology. Before starting the interview, participants filled out a socio-demographic form. Interviews were audio-recorded, except for one as the participant preferred not to be recorded. In this specific case, detailed interview notes were taken.

To open the conversation and familiarise the participant with the research purpose, the interview started with a discussion of three fictional scenarios describing potential psychological issues, probing for the interviewees' personal interpretation and solution of the described situation. In a subsequent section, we asked questions to elicit community perceptions on mental health and potential differences with Belgian perceptions. Subsequently, participants discussed personal (mental) health beliefs, as well as their personal experiences and approaches towards healthcare, comparing those in their country of origin with those in Belgium. In the final part, participants were asked about how they think that moving to, and living in Belgium impacted their health beliefs. We exercised utmost caution throughout the interview to not apply biomedical clinical concepts of mental health but use general wording such as 'feeling well', 'being healthy', 'worrying', etc., or referring to the aforementioned scenarios, to avoid a biased interpretation or social desirability to conform to a biopsychosocial view on mental health.

Data coding and analysis

We applied a reflexive thematic analysis with an experiential orientation, i.e. to grasp the meaning given by the participants to a certain phenomenon or concept (Braun and Clarke 2006; Byrne 2022). Data were analysed applying the six-phase reflexive analytical process in a flexible manner (Byrne 2022; Campbell et al. 2021), and a data-driven approach (Byrne 2022). The first author coded the data. The first and second author (LVP) explored and discussed interpretations of the data throughout the analytical process aiming to reach richer understandings of the data (Byrne 2022).

Ethics and Researchers' Positionality

The study was ethically approved by the Ethics Committee for the Social Sciences and Humanities of the University of Antwerp (SHW_20_48). We obtained written informed consent from all participants at the start of the interview, after extensive explanations of the aim and process of the research were given and potential questions were answered. After pseudonymised transcription of the audio recordings, the latter were deleted. The interviewer was a young, white female of Belgian origin. The participants as well as the researcher herself might have projected assumptions associated with this profile and underlying power dynamics. While the impact of interviewers' and research characteristics can never be excluded during data collection, the interviewer's previous professional experience with the topic, methodology and population of interest, consideration of ethical principles (e.g., informed consent), and the methodological choices (e.g., diversity in recruitment of participants, data collection until data saturation) may have mitigated interviewer bias.

4.1.4 Results

Participants' characteristics

The study comprised 16 women and 14 men originating from Burundi, DR Congo, Djibouti, Eritrea, Kenya, Rwanda, Somalia, Tanzania, and Uganda, with ages ranging from 21 to 65 (median=37.5). Participants had lived in Belgium for varying durations, ranging from 1 to 29 years (median=6). Of these participants, 20 had temporary residence status, while two arrived through family reunification, and seven had permanent residency. Sixteen participants had completed higher education, 12 had attended secondary school, and one lacked formal education. Of the participants, 29 identified as religious and scored the importance of religiosity on a scale of 1 to 10, with an average score of 8.8, indicating high importance.

Explanatory models of mental health

Perceived discrepancies

The participants clearly identified differences between how mental health is perceived in their country of origin and Belgium. They rather compared between continents and often referred to Europe or the 'Western world'. They associated Belgium, and Europe as a whole, with a greater knowledge base and more diversified vocabulary on mental health. In their country of origin, mental illness was often considered as 'craziness' or 'madness'. Someone who is mentally ill is seen as a person who is marginalised from society and who expresses deviant behaviour such as 'throwing stones' or 'running naked'. Some participants explained this because of their limited knowledge on mental health.

> *"Mental health is not considered a sickness in our country. If you have a mental illness, …, , you are classified as crazy. … Because we don't know much about it."*
> *(Woman, 37, since 2020 in Belgium, of Kenyan descent)*

Issues that would be defined as mental health problems within the biopsychosocial framework, such as extreme anxiety or sadness, were, however, not recognised as mental health problems. Describing symptoms which could indicate not feeling well emotionally, participants referred to 'a change in behaviour', 'being quieter', 'being tired', 'having loss of motivation', and 'isolating themselves'. These symptoms, however, were generally considered inherent to the harsh African life: priorities are to survive, put food on the table, get your children to school, work and have money. In some conflicted areas in East-Africa, suffering was perceived as part of everyday life.

> *"Yeah, in Eritrea nowadays, the stress and the depression, it is normal. It is not a mental illness. Why? Because in Eritrea, the political situation is not good. In Eritrea, the leadership is dictatorship. All the time the people are stressed and in depression. So, for the people in Eritrea, stress and depression is not a mental illness."*
> *(Man, 41, since 2017 in Belgium, of Eritrean descent)*

Therefore, many participants viewed having mental health problems as a luxury problem: only if people's basic needs are fulfilled, they can 'worry' or 'be sad'.

Also, (self-)stigma played a role: according to the participants, Africans are supposed to be resilient and strong; talking about negative emotions and potential mental health problems is considered a weakness. Interestingly, this was reflected in their use of language: participants often used wording such as 'challenges' rather than 'issues' or 'problems'. In this regard, they experienced a difference compared to how they felt that mental health was dealt with in Belgium, where considered that the topic got relatively more societal attention and was considered less taboo. However, they also perceived the

Belgian, individualised lifestyle with its focus on personal and professional development as more demanding and thus as a source of mental health problems. While in their country of origin, strong social networks and community life were experienced as protective factors. There, causes of mental health problems were perceived differently: physical causes such as substance abuse or lack of sleep were often mentioned, as well as disrupted social relationships such as divorce or the loss of a loved one. Almost a fourth of the participants also mentioned religious causes, stating that 'God is challenging them' or referring to 'spiritual' or 'satanic attacks'. While magical or supernatural forces were also mentioned as potential causes, most participants said not to believe in these. They argued that those beliefs were mainly present among low-educated people living in rural areas in their country of origin. Additionally, those beliefs were thought to be more present in West-African than East-African regions. Interestingly, participants with a higher education background including medical training, distanced themselves from these mental health perceptions, describing it as 'how non-educated people from the countryside see it'. They considered themselves more knowledgeable and were more prone to belief in the biopsychosocial approach. Although, we identified also supernatural elements in some of their narratives. For example, a trained nurse described her mother as having suffered from a spiritual attack in the past.

Migration trajectories and settlement conditions in Belgium caused a shift in the perceived primary causes of mental health problems among the participants. Socio-economic problems related to integration, such as finding housing or work and getting a residence permit, were identified as causal factors for mental health problems. Similarly, the lack or diminishment of community or social networks resulted for some participants in feelings of anxiety, isolation, or sadness. Previously mentioned causes of mental health issues were still of relevance but were often linked to the integration process and seen as a symptom or consequence of mental health problems rather than a cause, e.g., substance abuse.

Healthcare-seeking behaviours and barriers to accessing mental health care

In line with their predominant explanatory models, participants argued that EA-migrants would rather seek general healthcare instead of mental healthcare. Participants argued that EA-migrants postpone seeking healthcare until the health issue becomes very severe. They acknowledged that in that case, EA-migrants combined conventional Belgian healthcare with self-medication, as well as informal, cultural or religious healthcare-seeking behaviours, in the literature referred to as 'medical pluralism' (Olsen and Sargent 2017) or 'healthcare bricolage' (Phillimore et al. 2019). They associated Europe, or Belgium specifically, with an individual-based, biomedically oriented form of healthcare that relies heavily on medicine. While most participants were not in favour of the medicalised approach, they considered Belgian conventional general healthcare to be more effective and better developed

compared to their countries of origin. Participants with a legal residence status, additionally argued that the Belgian healthcare system is accessible with the social security system reducing financial barriers.

When participants deemed a health issue to be related to mental health problems, again, help-seeking was postponed until a person could no longer carry the burden on their own anymore. Most participants said that they would first turn to their religion to cope with feelings of anxiety or sadness: by praying and talking to their God, they could find relief. Participants for example with an Eritrean background explained that washing with holy water could help. In a next step, many participants claimed they would talk to someone else about their mental health issues, this other person would preferably be someone from their (religious) community.

> *"I am a believer, I think religion… within religion is where we can talk, where we can freely complain, talk, about all the weaknesses we have. (…) so, at the end of the day, our counsellors and our psychologists are what? Our priests, the pastors, and priests… In fact, that's what they do (laughs), they are our mental health service providers. That's where we go."*
>
> *(Woman, 55, since 2001 in Belgium, of Ugandan descent)*

Others would turn to a trustee, a close relative, or a friend who would handle their issue confidentially. If mental help was sought in healthcare while living in Belgium, it often happened in a transnational way, where a traditional or religious healer was consulted through social media or by visiting their home country.

In contrast with general health issues, participants mentioned four main interrelated barriers to accessing professional mental healthcare in Belgium. They lacked a specific understanding of Belgian mental healthcare and its organisation, but commonly associated it with individual talking therapy, often combined with a medicinal component. A first barrier was the different conceptualisation of mental health among EA-migrants, compared with the dominant biopsychosocial discourse in Belgium. Emotional or social struggles were not considered to be mental health problems that should be dealt with in a healthcare context. Second, participants had little experience with mental healthcare in their country of origin. Mental health clinics were mainly limited to urban areas, and focused only on persons with severe mental issues according to the participants.

> *"I wouldn't say we don't have psychologists, because there is a department of psychology in the university, so… there are definitely psychologists, but the culture is not used to it(…) unless you know, you get to that stage as where you're considered 'insane', then they take you to the hospital, medical… and we also only have one in Eritrea."*
> *(Man, 31, since 2019 in Belgium, of Eritrean descent)*

Some explained that for certain illnesses, which were believed to be caused by supernatural or religious forces, traditional or religious healers would be consulted. Therefore, most participants had little experience with conventional mental healthcare services and had little trust in them, which they projected on the Belgian mental healthcare services. A third barrier to access mental healthcare relates to a disbelief in the effectiveness of Belgian mental healthcare for their specific issues. Participants did not see the benefit in going into individual mental health treatment as it would not solve the financial or structural integration problems that were causing their *challenges*. Also, cultural differences in what defines a skilled healthcare practitioner created little confidence in Belgian mental healthcare. For instance, young practitioners were deemed to be less competent, as from the participants' cultural background, only elderly people were believed to have sufficient wisdom to give life advice to others. In addition, they would not feel understood by white Belgian healthcare practitioners as they lacked the same (migration) experiences or cultural background.

> *"Now the problem is about the culture, about how we have been raised. It's very difficult to go and face someone. And I think, another challenge, I know we are having different cultures, so if I come to you and I tell you about my challenges, you might see my challenges as like… you might not understand me properly. So, I've found it difficult to go and express myself to someone who is not from my origin. But I wish there could be someone, from maybe my country, (…) who is a professional; who I can go to and express myself, then this person will understand me better, and maybe I can get the service which I need; the help which I need."*
> *(Woman, 34, since 2020 in Belgium, from Tanzanian descent)*

A few participants opposed this, as they feared that healthcare practitioners with similar backgrounds might violate their professional secrecy and could spread their problems in the community. This is closely related to the fourth barrier: the high risk of (self-)stigmatisation within their community. This stigma withheld the participants from searching for professional help or following up on a referral to conventional mental healthcare services in Belgium. Participants did not want to be perceived as 'crazy' and feared to be expelled from their community or being judged by family members and friends if they openly talked about mental struggles. The stigma was not limited to their own individual social position, being seen as 'a crazy person' could also affect their family's social status within the community, referred to as ‘courtesy stigma’ in scientific literature (Goffman 1963).

However, despite the many intersecting barriers, some participants expressed a positive attitude towards conventional mental healthcare in Belgium. This was mostly explained by previous positive experiences, either in their country of origin or in Belgium.

"Me, I went to a boarding school and I started talking about [my issues] with religious people who supervised me. I started to talk, to write, because it felt good talking to someone else who is not from my family. […] Here, with my psychologist, it [talking] really helps me to have confidence in myself, and it also helps me to have someone to whom I can talk, who does not judge me."

(Woman, 37, since 2012 in Belgium, from Rwandan descent)

Other participants had accepted a referral to a psychologist by their social worker or general practitioner whom they trusted, and had made positive experiences with mental healthcare in Belgium. Also, some participants with a more biopsychosocial-oriented view on mental health or who deemed the Belgian approach to mental health as more developed, held a more positive attitude towards conventional mental healthcare services, but did not necessarily make use of it.

The influence of multiple explanatory models

Participants' migration trajectory and experiences after they settled had exposed them to different cultural explanatory models of mental health. Depending on their familiarity with the Belgian healthcare system, as well as their exposure to similar practices in their country of origin, participants were in favour of seeking conventional mental healthcare in Belgium. This was particularly noticeable in participants who originated from urban regions in their country of origin. These participants claimed that institutionalized mental healthcare departments with trained psychologists or psychiatrists, similar to those in the Belgian health system, were more prevalent in urban areas. Therefore, participants from these regions or with prior experience working in urban healthcare were already familiar with certain concepts and treatments. This was equally true for younger participants who often gained this familiarity through international (social) media channels. Several of these participants stated that mental health knowledge was too limited in their country of origin and that more health education among the general population was needed. They claimed that Belgian mental healthcare was better developed and effectively organised and thus held positive attitudes towards it.

In addition, integration processes influenced and transformed participants' explanatory models of mental health. While a common cultural base was described within their explanatory models of mental health in their countries of origin, we identified variety in how participants dealt with the dominant perception of mental health in Belgium. Some participants pronounced how their perception changed through exposure to and experience with mental health approaches in Belgium. They argued that because mental health is more openly discussed and gains (relatively) more societal attention, they were prompted to change their own thinking.

"But me, when I came to Europe… a small level was stress… I'm like "what is stress?" When I'm running for the bus, that is stressful, but it will go away. Do you understand me? So when I came to Europe I started learning it can… go in phases until your body can't take it anymore (…) that's when I started opening up "what is depression, what is stress, what are they talking about psychosis, what is that?"
(Woman, 44, since 2000 in Belgium, of Ugandan descent)

Other participants, however, were rather opposed to the conventional mental health approaches in Belgium and held on to the help-seeking behaviour in line with to the what they perceived as the dominant explanatory model in their country of origin.

"A psychologist? It can't change anything, since the problems you are going to expose, he too has his problems… But if you are with God, we know that before God, if you pray, if you... spend a long-time asking God for something, God gives you that. Because we trust our God more than others." (Man, 46, since 2012 in Belgium, of Congolese descent)

These different attitudes and beliefs translated into participants' healthcare-seeking behaviour: those who perceived their explanatory model to have been transformed by exposure to the dominant biopsychosocial approach in Belgium, were more in favour in accessing conventional mental healthcare services.

4.1.5 Discussion and Conclusion

With this study, we aimed to provide insight into how explanatory models of mental health among EA-migrants influence their healthcare-seeking behaviour. We highlighted participants' perceived discrepancy in the explanatory models of mental health among EA-migrants compared to the dominant Belgian discourse. Participants generally hold on to healthcare-seeking strategies as they used to in their countries of origin but are more prone towards using conventional services if they are more familiar with or have positively oriented towards adopting aspects of the dominant explanatory model of mental health.

With regards to our first research question, results show that study participants perceive differences between how mental health is defined in their country of origin and the dominant view in Belgium, confirming that mental health and related illnesses are socially and culturally constructed (Amuyunzu-Nyamongo 2013; McCann 2016). The definition of what constitutes a mental illness significantly differs from the dominant diagnostic frameworks within the Global North (Fernando 2002; Mendenhall et al. 2019; Mölsä et al. 2010). According to the participants, within their communities, mental illnesses were associated with behaviour that would be labelled as 'crazy'. This is in line with literature on localised

conceptualisations of mental health in African countries, where 'running naked' is an often mentioned symptom of 'craziness' (Fauk et al. 2022; Teferra and Shibre 2012; Ventevogel et al. 2013). Within the conventional diagnostic framework in the Global North, these behaviours would be labelled as severe mental disorders, such as psychosis or schizophrenia (McCann et al. 2018). Describing depressive or anxious feelings as normal reactions to difficult life circumstances and not as a medical disorder has also been reported by other studies (Amuyunzu-Nyamongo 2013; Linney et al. 2020; Makanjuola et al. 2016; Teferra and Shibre 2012; Ventevogel et al. 2013). With regards to perceived causes, our results are reinforcing previous research. While in the Global North the biopsychosocial model is predominant, psychosocial, religious and supernatural causal explanations are more common in sub-Saharan African regions (Amunga 2020; Makanjuola et al. 2016; Ventevogel et al. 2013). The religious and supernatural causes are mostly associated with severe behavioural disturbance (Makanjuola et al. 2016; Ventevogel et al. 2013).

Answering our second research question, these varying explanatory models partly explain why migrant populations only make use of conventional mental health care services when mental health problems are considered severe (Maier, Schmidt, and Müller 2010; McCann et al. 2018). In accordance with their dominant explanatory model of mental health, our participants explained that issues related to depressive or anxious thoughts can be resolved through social and emotional support that is pursued in formal networks, such as friends, religious networks and the community (McCann et al. 2018, Ventevogel et al. 2013). Healthcare-seeking strategies are further influenced by religious convictions: help is sought through prayer, through treatment with holy water or with religious leaders (Amuyunzu-Nyamongo 2013; Teferra and Shibre 2012; Ventevogel et al. 2013). After migration, African migrants hold on to this religious mental health-seeking behaviour (Fauk et al. 2021). However, the services of traditional or spiritual healers who provide a significant proportion of mental care in the countries of origin (Amuyunzu-Nyamongo 2013), are less available in countries of destination. Therefore, some migrants seek this kind of care transnationally (Thomas 2010). Additionally, the limited familiarity with conventional mental healthcare services among African migrants poses additional barriers to the utilization of those services (Fauk et al. 2022). Distrust of healthcare providers, concerns about confidentiality and privacy, and mental health stigmas often dissuade individuals from seeking mental healthcare services, perpetuating the idea that such services are only for those who are 'crazy'.

Stigma is a complex phenomenon which significantly impacts mental healthcare-seeking behaviour (Corrigan, Druss, and Perlick 2014; Salami et al. 2017). Stigma related to mental health is not unique to African cultures, but is found in diverse cultures worldwide (Abdullah and Brown 2011; Gopalkrishnan 2018; Kim et al. 2021; Zolezzi et al. 2018). Despite the persistence of stigma on mental health problems, also among the general Belgian population (Pattyn et al. 2014), participants perceived less taboo in the

Belgian context. Indeed, cultural aspects may increase the manifestation of stigma (Misra et al. 2021; Yang et al. 2014). Migrants often feel a personal responsibility to deal with issues on their own, to be strong enough and to 'keep going' (Salami et al. 2019). Personal shame, the fear of gossip and social exclusion deter their help-seeking behaviour (Knipscheer and Kleber 2008; McCann et al. 2018). There is little knowledge of how stigma can effectively be reduced in culturally diverse groups (Salami et al. 2019). Proposed strategies are to increase familiarity with conventional mental healthcare as well as to increase contact with people who use mental health services (Straiton, Ledesma, and Donnelly 2018). Our results contribute to that reasoning: participants who are more familiar with the dominant approach to mental health in the Global North were more open to accessing conventional mental health services in Belgium. These were generally true for young participants, originating from an urbanised context or who had previously worked in urban healthcare services in their country of origin. Urbanisation level has indeed shown to be a significant predictor of using conventional services (Knipscheer and Kleber 2008). This might be explained by the fact that throughout (colonial) history and globalisation dynamics, the (biomedical) terminology of the Global North has been spread and interacted with local cultures in Africa (Mendenhall et al. 2019; Olsen and Sargent 2017).

Our results indicate a flexibility and fluidity in explanatory models of mental health, influencing the mental healthcare-seeking behaviour among EA-migrants. Participants whose explanatory models were transformed by their integration processes and who had gained familiarity with Belgian medical discourses, held positive attitudes towards conventional mental healthcare. This indicates that a person's acculturation strategy, i.e. the way in how people adjust to a new culture (Berry 1997), is linked to mental healthcare-seeking behaviour. Our study did not assess participants' individual acculturation strategies in detail, so further research on this interaction in particular with health care seeking behaviour is needed. An earlier European study on help-seeking behaviour among West-African migrants in The Netherlands (Knipscheer and Kleber 2008) describes similar findings to our study. International research with other migrant population groups showed that recency of migration does not predict the use of mental health services, but rather the rejection of origin cultural values and adoption of host cultural values (Kirmayer et al. 2007). Especially the level of social integration contributes to the use of conventional services: being included in society creates a positive attitude towards these healthcare services (Knipscheer and Kleber 2008). These authors therefore argue that connecting mental health services with community members such as religious leaders might contribute to orient migrants towards conventional services. This resonates with transcultural mental health practices stating that inclusion of (African) cultural and religious values in healthcare can facilitate acceptance and access to its services (Fauk et al. 2022; Marsella 2011).

Limitations

This study has some limitations. First, since translation resources were limited, participant selection was thus limited by the researcher's language sufficiency to those participants who could speak English, French or Dutch. Therefore, participant selection might be unbalanced in terms of educational or urbanisation background. Secondly, due to the qualitative nature of the research, the findings represent subjective interpretations of a selected group of participants. However, our study aimed to be explanatory and to provide rich insights to increase the small evidence on this topic.

Recommendations

Our findings entail important implications for policy and clinical efforts to improve the mental health outcomes for EA-migrants in Belgium. The active involvement of EA-migrants' social and emotional support systems, such as their religious or community networks, in sensitisation and healthcare programs can play a critical role. Ideally, community involvement should be installed from the start to co-create the programs (Apers, Richter, and Van Praag 2021). Involving communities will help to tackle stigma, increase knowledge about conventional mental healthcare among migrants, and lower the barriers to the healthcare system. To increase access to conventional mental healthcare, the elimination of stigma should be prioritized (McCann et al. 2018). Within the healthcare context itself, replacing diagnostic labels with cultural idioms may help to reduce stigma (Misra et al. 2021). Healthcare providers' ability to use such idioms can be enhanced by acquiring knowledge about the cultural explanatory models of mental health among their patients (Dinos et al. 2017). This would promote the delivery of culturally appropriate mental health services. Mental healthcare practitioners should be aware of their (perceived) positionality, and the specific difficulties related to migration and integration EA-migrants encounter. A greater diversity in healthcare personnel with knowledge of different cultural explanatory models, would increase the recognisability for migrants and will contribute to effectively address the mental health needs of this population.

4.2 **Article 2:** Explanatory Models of (Mental) Health Among Sub-Saharan African Migrants in Belgium: A Qualitative Study of Healthcare Professionals' Perceptions and Practices

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4.2.1 Abstract

Culturally differing approaches to the distinction between physical and mental health contribute to cultural differences in explanatory models of mental health. This interpretative, interview-based qualitative study focuses on (mental) health professionals in Belgium, experienced with patients from sub-Saharan African (SSA) descent. Study-goals were threefold: first, assessing professionals' perceptions of the explanatory models of their newcomer patients of SSA descent. Secondly, examining how these perceptions influence treatment practices. Thirdly, investigating the role of professionals' cultural background, comparing the results between professionals with and without a SSA background. Twenty-two in-depth interviews with (mental) health professionals were thematically analysed. Ten participants were of SSA descent. Results show that all professionals perceived differences in Western and SSA explanatory models of mental health. Causal beliefs were mentioned as the most important difference and their influence on coping strategies and health-seeking behaviour among SSA newcomer patients. Professionals' perceptions and familiarity with SSA explanatory models of (mental) health affected their treatment practices. Language and conceptual interpretation difficulties were less encountered by professionals of SSA descent. Those with a Western background applied 'culturally sensitive' practices, while professionals of SSA descent implemented an integrative approach. These results contribute to ongoing discussions on what is considered as 'cultural competency'.

4.2.2 Introduction

The concept of mental health is understood through a personal 'belief system' which is shaped by diverse factors including personal knowledge, education, social interaction, experience with healthcare, religious affiliation and cultural factors (Jimenez, et al., 2012). Referring to the importance of culture, Kleinman, et al., (1978) coined the term of 'explanatory models'. Dinos, et al., (2017, p.106) defined this concept as the "culturally and socially defined process of explaining illness and disease, ascribing meanings to symptoms, evolving causal attributions, and expressing suitable expectations of treatment and related outcomes". Different understanding and interpretations of mental health can thus occur

across different cultural contexts (Choudhry, et al., 2016). Cultural differences in explanatory models become very apparent when the concept of 'mental health' is considered. Making a distinction between physical and mental health is not in all cultures present to the same extent. Therefore, we choose to not imply the Western notions by default, and use brackets when referring to '(mental) health' throughout this article. The distinction found its origin in the ancient Greek empire in the ideas of the philosopher Plato. These ideas formed the basis of later notions of the Cartesian dualism of body and mind (Fernando 2002). Until now, Western medicine generally distinguishes the individual as a subject opposed to the outside world. In doing so, it predominantly applies the reductionist biomedical concept of illness: the body is fragmented in different organs and functions with their own treatment specificities (Fernando 2002; Stroeken 2017). Nevertheless, other schools of thoughts have been paying more attention to the physical-mental and social dimensions. Criticizing the biomedical model as a culturally defined belief system, George Engel proposed a holistic approach with his conceptualisation of the bio-psycho-social model (Gritti 2017). While the model in itself has been widely debated (Gritti 2017), it correctly points to the fact that in non-Western cultures indeed, distinct perspectives on health applying a holistic perspective existed. Those perspectives consider the human being as an integral entity, in constant interaction with its physical and social environment (Fernando 2002). On the African continent, a 'medical pluralism' arose because of its historical context and diversity. Where Western imperialism and colonialism tried to install biomedical approaches and subordinate other practices, social science research indicates that these approaches currently coexist with other forms of practicing medicine, such as Islamic healing, herbalism, ritual specialisms, evangelical healing, spirit possession beliefs, and other local health practices (Olsen and Sargent 2017). Williams and Healy (2001) exactly point to this diversity and complexity inherent to explanatory models: these do not consist of a defined coherent set of beliefs that can be defined 'per culture', but rather a variety of explanations that possibly can co-exist, in a flexible way. Particularly in sub-Saharan Africa, local healing systems and biomedicine are informed and transformed through interaction across time and space (Olsen and Sargent 2017). African patients nowadays have multiple options to deal with 'illness' depending on differences in interpretation of causation and possible treatments. This is reflected in the 'therapeutic continuum' that exists on the continent, ranging from biomedicine to nonbiomedical approaches (Olsen and Sargent 2017).

Human migrations challenge cultural explanatory models in different ways. On the one hand, a migrant's health belief system is challenged when the dominant explanatory model in the country of origin significantly differs from that in the country of residence (Grupp, et al., 2018). For individuals moving from sub-Sahara Africa (SSA) to a Western-European context for instance, this implies that the pluralist approach they used in their country of origin is no longer applicable and they are expected to adopt a predominantly biomedical health system. This impacts their perceptions of the healthcare system and

may be experienced as culturally inappropriate (Gopalkrishnan 2018). It can evoke issues of racism or discrimination, and influence their health-seeking behaviour (Gopalkrishnan and Babacan 2015). On the other hand, a practitioner's explanatory model could also be challenged through the interaction with a patient from a different cultural descent (Kleinman and Benson 2006). A healthcare practitioner could bring multiple explanatory models to the consultation based on their personal and professional background (Marsella 2011). Potential cultural gaps between patient and practitioner cause errors or treatment-induced problems, and/or impact the therapeutic relationship (Bhui and Bhugra 2002; Marsella 2011).

In multicultural consultations, it is important to study the explanatory models of (mental) health of both the patient as the practitioner, as well as how these models interact (Gopalkrishnan and Babacan 2015). Previous research indicates that patients are most satisfied when the consulted practitioner shares the same explanatory model (Gopalkrishnan 2018). Having a shared explanatory model in turn enhances the *cultural competency* of practitioners, enabling them to move between cultural perspectives (Bassey and Melluish 2013). This allows the practitioners to direct their practice to the needs of their patients and install an effective therapeutic relationship (Bassey and Melluish 2013). *Cultural competence* is a widely-used term, referring to a framework in which attributes, characteristics or behaviours of service providers, as well as policies, facilitate effective work in cross-cultural situations (Pon 2009; Wendt and Gone 2012). Yet, the term is lacking a delimited definition, and is contested for multiple reasons: it is being reduced to a technical skill and it essentializes culture (Kleinman and Benson 2006; Wendt and Gone 2012) . Cultural competency is even criticized as a form of new racism as it is otherizing people of colour and builds on white, absolute view of 'culture' (Pon 2009). While a more pluralist approach on the term is definitely required, being 'cultural competent' as practitioner remains to be seen as a necessary stage in the context of cross-cultural consultations (Bassey and Melluish 2013).

Few research examines how practitioners experience and perceive cultural differences in their therapeutic practice (Mollah, et al., 2018; Suphanchaimat, et al., 2015). This study focuses on healthcare professionals in Belgium who regularly interact with patients who recently migrated from SSA, with a threefold purpose. Firstly, this study aims to investigate healthcare professionals' perceptions on potential differences in explanatory models of (mental) health between them and their patients. Secondly, it aims to understand how these perceptions influence their treatment practices. Thirdly, it explores if and how the cultural background of these professionals plays a role in their perceptions and practices, through a comparison between healthcare professionals of SSA descent and those of West-European descent.

A considerable part of Belgian newcomers have a SSA nationality or origin: 6% of international newcomers in Belgium are people of SSA origin. In addition, people with a Belgian nationality but born in SSA account for 10% of people born outside Belgium obtaining the Belgian nationality (Noppe, et al., 2018). Figures on people of SSA descent treated in Belgian mental healthcare are limited, because data on ethnicity is not systematically collected and subject to privacy regulations. One type of mental health facility in Flanders, namely the Centres for Mental Health Care, register the nationality of their patients, accounting for 0.2 % of all patients in the facility (e-mail communication Zorg en Gezondheid 17th November 2017). This could indicate a treatment gap in (mental) health care, i.e. the gap between the real prevalence of persons suffering from mental conditions and those who get an effective treatment (Meys, Hermans, and Van Audenhove 2014). In addition, research indicates that newcomers from SSA descent experience specific social and migration-related stressors that might lead to increased mental health suffering, such as high levels of discrimination and racism, unemployment, and precarious living conditions (Demart et al. 2017; Pannetier et al. 2017; Tortelli et al. 2014). By focusing on health care professionals' perceptions on and practices when dealing with recent newcomers who are at the beginning of an integration process in Belgian society, discrepancies in differing explanatory models will be most noticeable and problematic.

4.2.3 Methods

Study design

An interpretative, interview-based qualitative research study design was chosen to gain better understanding of professionals' perceptions and experiences on explanatory models of mental health of their patients of SSA descent. In-depth interviews were conducted in the course of 2020.

Recruitment procedure

A purposive snowball sampling recruitment procedure was applied. Respondents were selected according to their professional position: working in the Belgian healthcare sector and having members of the sub-Saharan community in Belgium as their patients, or in civil society organisations dedicated to supporting SSA newcomers in navigating the healthcare system. The aim was to recruit a balanced sample in terms of cultural background to study differences in explanatory models of mental health among the professionals and the influence thereof. Hence, both professionals of SSA and Western-European descent were selected. Candidates were selected using different entries in (mental) health organisations, institutional affiliations and civil society organisations, as well as personal networks from the authors. Candidates were contacted with an invitation to share their individual stories on the topic

or with a question to spread the inquiry within their own network. Through further snowball sampling rounds, more participants were recruited until data saturation was reached.

Participants' characteristics

A wide range of professionals in terms of gender, age, professional and migration background was included. In total, 22 participants were involved in the study. Of them, 16 were individually interviewed and one focus group discussion was held with six participants from the same mental health organisation. Seven participants worked in the regular healthcare system either as general practitioner (GP) or health-promoting professional in primary care or as psychologist or psychiatrist in specialist care. Fifteen participants worked in civil society organisations (CSO) or state-funded projects that provide support for socially vulnerable people or people with a migration background, and with (specific) healthcare issues. Seventeen participants were more than five years active in the healthcare sector. Eleven participants (of which all focus group discussion participants) were female. Twelve participants did not have a migration background, ten participants were of SSA descent with origins in Burundi, Cameroon, Congo, Ghana, Kenya, Rwanda, Uganda. Nine of them were first-generation migrants and one a second-generation migrant.

Data collection

In-depth interviews were chosen to study health professionals' perceptions, experiences and practices as this allowed for a thorough exploration of the topic, and a flexible approach (Denzin and Lincoln 2011). The first author conducted all interviews, allowing for consistency in interview methodology. Interviews were conducted in Dutch, French or English. Since the research was carried out during the Covid-19 pandemic, preventive measurements impeded physical meetings at certain periods of time. Sixteen interviews were conducted online through a platform of preference of the interviewee (Zoom, Jitsi Meet, Skype). An open-ended topic guide was created, including questions on the interviewee's background, views on their own and their patients' explanatory models on (mental) health, professional experiences, reflections on cultural competency. In addition, one focus group discussion took place with six members of one institutional team of mental health professionals, due to lack of time and organizational issues. The group discussion topic guide covered the same topics, but questions were adapted to the group situation. Data collection was conducted between June 2020 – October 2020.

Data coding and analysis

A reflexive thematic analytical approach (Braun and Clarke 2006) was applied. Data were coded and analysed by the first author. First, familiarisation with the data was achieved through the verbatim

transcription of the audiotaped interviews. The transcripts were imported in the qualitative data analysis software, NVivo 12. Initial codes such as “cultural differences”, “migration experiences”, “mental health conceptualisation”, etc. aimed at identifying commonalities and discrepancies in perceptions and practices of the participants, were generated inductively. A first version of a data-driven codebook was developed. Next, overarching themes such as “professionals’ perceptions” or “implications for healthcare” were identified and the codebook was further scrutinized. The codebook was reviewed by the last author. In an iterative process, the codebook was further developed with (sub-)themes conceptualized based on the data such as “professionals’ perceptions on patients’ mental health explanatory model” and discussed among the first and last author to resolve any possible inconsistencies. In the process of drafting this article, all authors contributed to the clarity of the analysis, whether conceptions and descriptions should be further scrutinized or interpretations validated.

Researchers’ positionality

The first author who conducted the interviews is a PhD-candidate in social sciences. Being a young, female of Belgian origin may have impacted the data collection as assumptions associated with these characteristics might have been projected, by participants or by the researcher. While these effects are never to be excluded, the researcher aimed to counter them by applying her educational background in psychological and psychiatric anthropology, as well as previous professional experience with the topic and with qualitative research.

Ethics

The study was ethically approved by the Ethics Committee for the Social Sciences and Humanities of the University of Antwerp (SHW_20_48). All participants received an informed consent form prior to the interview and were given additional explanations at the start of each interview. In case of online interviews, oral consent was obtained. After the pseudonymized transcription of the recordings, these recordings were removed and deleted.

4.2.4 Results

Professionals’ own explanatory models

The health professionals perceived mental health as a distinctive part of general health. Their narratives often revealed Western mental health concepts such as stress, depression or schizophrenia. While they acknowledged that perceptions of causes of (mental) health issues differ among their patients, their interpretations of these were mostly contextually or biomedically explained.

"For example: an African who has a headache, the majority ... especially those people who are in rural areas, but also educated people or people living in an urban context ... would immediately think of a traditional cause, or some other cause, instead from an ordinary, physical cause, an environmental cause… […] then you ask the question 'yes, but that's just a headache, go to the hospital, go for a diagnosis and then you get a medicine for it…'"

(P6, male, of SSA descent, working in CSO)

When explaining possible contextual sources of (mental) health issues among the group of SSA newcomers, the participants referred to the migration and integration context and its related stressors. They identified the Belgian reception system as a source of (mental) health issues:

"So firstly, the reasons [of migration] and secondly, the route, so the route they have travelled […] And the difficult path, certainly, has painful effects, painful effects on their mental health too. And once here, they are faced with an inhumane asylum procedure: it takes too long to get an answer. People are hidden [away] in asylum centres, […] the perception of asylum centres for many is that it is a form of, a kind of prison. You are hidden there, parked, waiting."

(P23, male, of SSA descent, non-medic working in CSO)

Using their own explanatory model as a framework, a few participants related these differences to what could be called mental health 'ignorance' (Atilola 2016). They explained that SSA newcomers neglect or are not aware of their mental health issues:

"Often people don't think in terms of 'me' and if they have that at all, then they don't talk about it, because it would make them seem selfish, ... and they don't want that, then they have something like 'oops, ah no because our parents, my sisters and my brothers need us and we are here doing this together'... so not recognizing that someone is an individual and only the collective makes it difficult for those people to … recognize the individual script and talking about it, so it is often suppressed, or expressed in other ways."

(P3, female, of SSA descent, psychologist)

The participants referred to multiple personal and environmental factors influencing this ignorance, such as stigma, their collectivist cultural background or the fact that newcomers' main priority is survival. Others related it to low (mental) health literacy: these patients are not familiar with the Western medical system and are thus not aware that the complaints they are suffering from, are in fact frequently categorized as mental health problems within that system.

Professionals' perceptions on explanatory models of (mental) health among their patients of SSA descent

All study participants acknowledged that differences between Western-European and sub-Saharan African explanatory models of (mental) health existed. The most substantive insights came from professionals with a first-generation SSA migration background who were familiar with both explanatory models due to their personal migration history. Other participants also recognised differences, but these were acquired through personal interest or research, or derived from patients' narratives. However, an importance nuance was pointed out by the majority of the participants, stating that the way in which patients explain and experience mental health is mainly determined by individual perceptions. They found it too generalizing to define 'culture' as the common differentiator in how newcomers of SSA descent perceive (mental) health.

The professionals referred to both mental and physical health interchangeably when talking about the explanatory models of their patients. They reported that in SSA explanatory models a holistic and integrated view on health is applied, rather than distinguishing between mental and physical health. The most stressed differences were attributed to causal beliefs and especially the influence of supernatural forces: bad spirits, angry ancestors or voodoo practices that cause a person to be (mentally) unhealthy. Often, participants referred to these as 'traditional' beliefs. According to them, these beliefs are very present in many SSA countries and can take several different forms in line with the heterogeneity of cultures and ethnicities within the region. Some of the participants contrasted them clearly against 'Western' medicine, referring to the biomedical approach that is taught in African medical education and practised in state hospitals and medical institutions.

> *"Some people used to say: 'this is not a western disease', meaning that at a certain time, when the medicine doesn't work, … because they assume that the Western medicine is effective. When it doesn't, when it fails, the conclusion will be: this is not a medicalized problem, […], meaning then, that it is either a traditional-related problem, spiritual problems or curse."*
>
> *(P11, male, of SSA descent, working in a state-funded project)*

While in this quote, Western medicine seems to be given priority, other participants of SSA descent referred to medical pluralism as common in their countries of origin, and people combining different beliefs at the same time.

According to some participants of SSA descent, it was believed that through supernatural influences a message is sent to the larger network of the sick person. They explained that health understanding in

SSA cultures is mostly rooted in collectivist cultures and causes of health problems are therefore seen in (family) relationships and interpersonal interactions.

> *"So the sick person is not seen as sick as such, but rather as someone who certainly carries a message…, who is saying something through family members. Why? Because… when someone dies, he is not far… (laughs) […] we sometimes see signals, from which signals that it is necessary to decode […] Maybe they got angry, so it takes a ritual […] Even physical illness has a connotation that's a little bit supernatural […] often, the evil facts are due to these bad spirits who get angry and who, through family members, can cause behavioural disorders and delirium at that time, it is necessary to know what do they want. And this is the realm of traditional healing."*
>
> *(P8, male, of SSA descent, working as GP in a CSO)*

This quote demonstrates that illness is not solely experienced in an individual sense, but has a meaning in a familial and community context. Therefore, the larger community is involved in the diagnosing and healing process of an individual person.

The study participants also perceived religion as very important in their patients' explanatory models of health. Religion-related explanations often enter the narratives of their patients (e.g. "*God is testing me*"). These were linked with the aforementioned 'traditional' beliefs, as bad forces or spirits can be the counterpart of the divine characters in religion, such as the *djinn*, a supernatural being within the Islam. Some participants without migration background referred to the place of religion in Western history, linking it to their own explanatory models.

> *"But actually we are not that far from that [causal beliefs about djinns]. If you were Catholic a few decades ago, it was the devil and ... well, I mean, that was kind of the same thing […] in the end ... what's so different about that?"*
>
> *(P18, female, of West-European descent, CSO)*

The participants saw the causal beliefs reflected in the coping strategies and help-seeking behaviour of newcomers of SSA descent: very often they will turn in the first instance to community members for help, seek support in praying and attending religious celebrations, or make contact with, or – if possible – travel back to their country of origin to get treatment from their "traditional" healer.

> *"No, in my environment, I don't know anyone who has asked for help from formal Belgian institutions in difficult situations. We don't have such institutions in our countries of origin; they try to find solutions within society, with the wise, with people who have experience or people*

who are trusted. And this cultural aspect immigrated with them, when one is here… […] We are looking for a person of trust in society, for some they go to the pastor and sometimes to the priests and sometimes to the elderly or maybe to a friend, yes. So for me, there are two explanations, first: in their culture they don't have such structures, right and secondly, it's also a form of lack of trust…"

(P23, male, of SSA descent, non-medic working in CSO)

As this quote illustrates, participants did not only relate this to differences in explanatory models, but also to familiarity with, and especially, trust in the Belgian healthcare system. Also, they reflected upon the role of community and religion as something that comes back in many cultures and is not only specific among newcomers of SSA descent.

Implications of different explanatory models for the professionals' healthcare practices

Depending on the professional context, participants engaged in different treatment practices: most individually working participants applied talking therapies, combined with behavioural treatments, such as anxiety and stress-reducing exercises. Those who worked in societal organisations, organized group therapies or workshops. We explored how cultural differences in (mental) health understanding influence their treatment practices and how they act upon them. First of all, difficulties with language and conceptual interpretations were mentioned. While participants tried to solve this by using translators, it became clear that the problem goes beyond pure linguistic understanding.

"We realized that with our - how should I put it - our Western methodologies and knowledge, we actually never got there. There was a language problem, but we noticed that if we could overcome that language problem through interpreters, we would run into problems with concepts…; people did not understand the concepts, did not care about "what is mental health care?". […] Plus the fact that we found out quite quickly that yes, they do have a completely different meaning to illness."

(P9, male; of West-European descent, psychiatrist)

Such conceptual differences were perceived to potentially cause problems with diagnoses because other meanings were ascribed to symptoms and behaviour. Moreover, when culture-specific concepts or metaphors enter treatment, these discrepancies were found to jeopardize good continuation of the treatment:

"When you notice that a lot of things (..) cannot be interpreted literally, but that the words…, like, when we give psychoeducation, the interpreter was squirming in his chair like 'how am I

supposed to translate that? And then the other way around, […] a client very often gave the example of 'the feeling from 'hagaa[3]'' or something, and hagaa must be some very warm wind that blows from time to time in Somali land areas… [..] we really have to look for 'what does that mean?' 'Yes, that is such a very warm feeling, okay, but what does that do to you?' […] it takes time to really take it in, what does he actually mean by that statement, because yes , we don't know?"

(P22, female, of West-European descent, CSO)

Participants of SSA descent indicated to experience less misinterpretations and fewer discrepancies in understanding. They felt they have a better notion of cultural references within patient's narratives and sometimes share the same language. Additionally, they mentioned that this familiarity results in gaining more trust from their patients. They noticed that patients project expectations of greater cultural recognizability on them.

"I have also experienced […] many people who actually said 'no, I want to be with [names himself]', and my colleagues said 'no, but why?'. Then they don't answer, 'no, just him'. But when I start talking to them I hear like 'no, you can understand me better' and they say 'your Belgian colleague will not understand me'".

(P6, male, of SSA descent, CSO)

When talking about 'mental health', participants stated that this was often interpreted by newcomers of SSA descent as 'madness' and extreme forms of psychosis, due to their conceptualization. This brought along a discourse of stigma: professionals working in societal or supportive organisations felt that patients were reluctant to enter the mental healthcare system as they feel vulnerable for (self)-stigmatisation.

"I was talking to one of the patients and I advised her 'you should really see a psychiatrist, because I think you're almost at the edge of being depressed' and she was very, very disturbed about using the word 'depressed'. 'I'm not mad, you know!'. So you see, people are already sensitive to the word because of the stigma attached to it, so I mean, the phenomena are universal, but the wording (…) is different according to the context."

(P4, male, of SSA descent, working in a state-funded project)

[3] Hagaa refers to one of the two dry seasons in Somalia. It consists of a period of drought (July-August), followed by rain (October – November) (Chapin Metz 1992).

While mutual trust was deemed essential by the professionals to facilitate the treatment process, different expectations on what treatments entail was said to complicate the relationship with patients. Some professionals also stumbled upon the limitations of their own explanatory model and questioned if they are equipped enough to help their patients.

> *"It is correct to ask ourselves: 'to what extent is Western healthcare adapted to their needs?'. A woman that I accompany has been in psychological care for a long time and before she came to me, she already attended therapy at another organization and actually picked up the idea of 'I have to talk to be able to free myself, talking is going to heal me'. While, when we talk about the meaning of talking in her country of origin and family culture, it is quite the opposite, talking is something very ... it is something that didn't happen and something she was even punished for … so, that idea of 'you must speak in order to heal' is in any case very loaded […]. I have had this woman in therapy for a long time now, but I myself am not quite sure yet to what extent this will help her."*
>
> *(P16, female, of West-European descent, psychologist)*

The diversity in background, positioning and self-reflexivity of participants created a great variety in the acknowledgement and place given to culturally different explanations of mental health in their treatment context. While all professionals acknowledge that culturally different explanations play a role in the narratives of their patients, they apply various treatment approaches in which these explanations are given a different place. At this point, personal and professional explanatory models often got intertwined due to the impact of institutional ideologies. For instance, ethno-psychiatrists searched for ways to not only practice Western treatment standards:

> *"There is a case - which can be a person, a family, one or more people who have a problem in common – with cultural references. And around this problem, we bring together a group of therapists. Multiple origins, multiple trainings. Everyone comes with their background, and ... we can engage in the discussion, we can talk about who we are, how things are. […] we re-establish equality. So, we do […] a group treatment but where there are generally more therapists than patients. […] And we always refer to traditional representations, and we do not try to erase other references; medicine,… the… or references from several continents, […] we build, it is the co-construction, the therapeutic reality, that is the ethno group."*
>
> *(P5, male, of West-European descent, CSO)*

Their aim is to co-construct a practice that combines Western standards with other cultural practices, for instance through sending their patients on a 'therapeutic trip' to their country of origin, or through

collaboration with local healers. These ethno-psychiatrists were therefore completely opposed to the use of psychoeducation, a practice where mental health knowledge is transferred to a patient and his or her family (Prost, et al., 2013). For those professionals, the use of psychoeducation imposes the Western notion of mental health upon patients and implies superiority. However, professionals with differing ideologies, such as a transcultural ideas, but also those without a distinctive ideology, practised psychoeducation at a regular basis. Some used psychoeducation as a practice to explain their patients how they work and a manner to enhance their mental health literacy. They felt that psychoeducation would familiarize their patients with the Belgian healthcare system and facilitate their continuation in treatment. In their opinion, patients would understand better wat they could expect and what would be expected of them.

> *"When we tell them ..., when they complain about sleep disturbances, nightmares, haunting ideas and are told 'go see the psychologist', that refers to insanity. […] So we need an approach, I would say, psycho-educational, how to explain to them and especially explain to them how we are going to work and how we are going to help them."*
>
> *(P8, male, of SSA descent, working as GP in a CSO)*

An important finding that emerged from the data is that professionals of SSA descent integrated their knowledge of both explanatory models in their treatment. Some of them explained to their patients that symptoms are universal but are dealt with differently, depending on the healthcare system. Others familiarized their patients with the dominant health system by embedding Western treatment aspects in a SSA explanatory model narrative: they linked and compared actors or concepts of SSA explanatory models with Western treatment steps that the patient should take:

> *"I say, 'it is like what you do when you go to a 'marabou', a magician. Normally, you tell your story and then the other… treater, the traditional treater also helps you mostly with his story' and I said, 'when they help you with his story, they also normally give you herbs […] or they give you pieces to wear, like pieces of wood or a piece of skin.' So I told the lady, when you go to this person, what he or she will do, will… try also to use your story to help you to get relief and listing thoughts […] But he or she will also give some, some medications, like in Africa they would give you something to drink or whatever, so I was trying to convince her, that in fact, it is not very different. So it's the same way, but they will call him here the psychiatrist, but we are not going to separate very much with what you know, what you live in your country. And then it goes easier. I mean, it's like a bric-brac way but…"*
>
> *(P4, male, of SSA descent, working in a state-funded project)*

The result of this practice was often intended to have the patient 'taking medication' or 'going to the psychologist or psychiatrist', arguably also a form of psychoeducation.

Participants without a migration background did not mention such integration practices, but instead implemented what they explained as a 'culturally-sensitive practice'. They try to detect the meaning and place of cultural references within the narratives of their patient and work on that (see quote of P22).

> *"In fact, we start from a 'not-knowing' position: 'explain what that means for you as a client' and also look at 'what is the function in his story?' For example, such a supernatural spirit, how does that influence his struggles, and how can you use that as an asset in your therapy? But it is different every time, because it's different for everyone, and you have to be creative with that.."*
>
> *(P19, female, of West-European descent, CSO)*

Some of these professionals used specific tools as guidance, such as the CFI, the Cultural Formulation Interview, integrated in the Diagnostical and Statistical Manual of Mental Disorders (American Psychiatric Association 2013). Another strategy was to invite cultural representatives, such as cultural mediators or religious leaders, to facilitate conversation and overcome barriers caused by culturally differing understandings with their patients. Also the larger community, such as neighbours or supportive organisations, was invited from time to time during the treatment. By applying a more holistic approach, these professionals sought to install a larger support system around the patient. This also corresponds to their patients' illness and healing experience, which is lived in a broader, communal context.

Beyond a standardized practice

All participants were convinced that attention should be given to cultural references, but stated that a 'magic bullet' does not exist: not all patients with a similar cultural background can be helped with a standardized 'culturally sensitive' practice. Many of them therefore said to apply a client-centred method, starting with an extensive exploration of the person's health problem and situation, and using their narrative as a guideline for their therapeutic practice. In addition, they expressed the need for a broader approach and referred to structural issues within the health and reception system that should be dealt with. In their opinion, a more holistic approach should be facilitated in the Belgian healthcare system where community-based key persons and primary care practitioners could play a pivotal role. They felt that sufficient attention for cultural aspects is lacking in (mental) healthcare organization. They were therefore in favour to include culture-related topics more substantially in the training of (mental)

healthcare professionals and believed that investments should be made in greater cultural diversity among healthcare professionals.

> *"I think raising awareness and being really open to looking at different visions […], that will help anyway, and can act as a bridging function... that will just ensure that the threshold is lower, also to seek help. Because the more people start to be sensitised, the more the immigrants also start to feel like 'see, it is even put in the curriculum, they do their best to help our culture...' […] We don't actually see any social workers with a different background, migration background, we only see the prototypical natives, but yes 'what do they know about our culture'. While, as I think, as they see more and more cooperation, they will be more at ease and the threshold will be much lower."*
>
> *(P3, female, of SSA descent, psychologist)*

Furthermore, the study participants pointed to the importance of the Belgian reception system in the (mental) health outcomes of newcomers of SSA descent. They considered the reception system to impact harmfully on mental health among newcomers because of the overly administrative, time-consuming, and at times dehumanizing, practices. They felt at times powerless and argued for an adaptation of the system to minimize these harmful stressors for their patients.

4.2.5 Discussion and Conclusion

This study examined the perceptions and practices of healthcare professionals in Belgium who regularly interact with patients with a recent SSA migration background, on the subject of mental health. Results showed that healthcare professionals perceive differences in how people understand (mental) health. The study participants mentioned differences in causal beliefs. Familiarity with SSA explanatory models of (mental) health shaped professionals' treatment practices with SSA newcomer patients. A greater familiarity enabled healthcare professionals to have a conversation or treatment that corresponds with the explanatory model of the patient, which in turn facilitated treatment practices. However, the study participants pointed to structural issues within the healthcare and reception system, and argued for a more holistic healthcare system.

The perceived differences in explanatory models by the study participants align with what can be found in international academic literature. Various authors who described explanatory models among sub-Saharan Africans, or newcomers of SSA descent, point to the importance of religious and supernatural causes, the interrelation of body and mind, as well as the collectivist nature of health beliefs, where illness causality is situated in the social world (Gopalkrishnan 2018; Grupp, et al., 2018; Helman 2007; Mayston, et al., 2020; Patel 1995). Also, effects of differing explanatory models on health-care seeking

and coping behaviour among newcomers, in which the role of religion cannot be underestimated, are extensively described: newcomers use prayer and maintaining belief in God as coping strategies (Kewley 2018; Ward, Clark, and Heidrich 2009), and search endorsement from religious leaders as sources for help (Markova and Sandal 2016).

The results of this study add three key findings to the existing literature. First, while language barriers are often expressed in transcultural research (Giacco, Matanov, and Priebe 2014; Sandhu, et al., 2013), our findings showed that the experienced difficulties go beyond pure linguistical problems. Rather, conceptual misunderstandings posed a barrier to healthcare professionals when treating patients from a different cultural background. Professionals of SSA descent experienced these issues to a lesser extent, because of their familiarity with their patients explanatory models of (mental) health. They applied an integrative practice approach by using (linguistic) concepts from their patients' explanatory model to facilitate accordance with their treatment. These findings substantiate what was argued by Bhui and Bhugra (2004) earlier: a core task of mental health professionals should be to reconcile different explanatory models during their consultations. While a shared language is deemed central to cultural understanding (Gopalkrishnan 2018), addressing cultural issues is more important and goes beyond understanding the language (Arafat 2016).

Second, our results indicate that familiarity with explanatory models influences the practitioner-patient relationship. This mainly showed a divide in professionals with and without a similar cultural background. Results indicate that professionals without a migration background felt at times confronted with the limitations of their own – Western – explanatory model. These professionals tried to overcome cultural differences by applying 'culturally sensitive' practices through exploring potential cultural references in their patients' narratives. Hence, they fostered cultural concordance with their patients, i.e. building rapport and constructing a good therapeutic relationship (Mollah, et al., 2018). At times, they implemented a more holistic approach by including a broader network of community and family support systems, which is known to be very useful in most cultural groups (Gopalkrishnan 2018). Professionals with a similar migration background as their patients, experienced that these have greater trust in them, and presumed that this is because patients feel recognized in their cultural identity. This corresponds with previous findings indicating that a shared explanatory model facilitates patients' satisfaction in treatment (Bhui and Bhugra 2002; Marsella 2011), as it builds a strong rapport between patient and practitioner (Mollah, et al., 2018). Strong difference in views can result in distrust and complicate establishing a therapeutic accordance (Giacco, et al., 2014). Similar qualitative research conducted in Australia among professionals with immigrant patients, showed that operationalisation of culturally competent practices was found to be dependent on several factors including practitioners' cultural background and cultural exposures (Mollah, et al., 2018).

As a third key finding, our study demonstrates the importance of a supporting comprehensive healthcare context. The study participants felt that regarding the provision of culture-appropriate healthcare, the healthcare system falls short in both training its professionals, as well as in creating a supportive platform for an holistic approach. International literature supports the necessity for holistic health services and points to the fact that incorporating community-based ethnocultural services have positive effects (Marsella 2011; O'Mahony and Donnelly 2007). Practices that reflect religious or supernatural beliefs can stimulate hope and strength, and be a source for resilience and healing (Choudhry, et al., 2016; Gopalkrishnan 2018; O'Mahony and Donnelly 2007). Health systems should strive for equity in which not only collaborations or partnerships enhance the 'cultural inclusiveness', but also for a hybrid system in which professionals of diverse backgrounds, and especially those from the communities at stake, are well represented (Gopalkrishnan 2018; Wendt and Gone 2012). Furthermore, participants referred to integration-related stressors as drivers for mental health suffering. The current reception system in Belgium was denounced by a great part of our participants as a cause for (mental) health problems among newcomers through its complicated and long procedure. Research has indeed shown that many post-migration stressors are related to a perceived unjust reception system and a sense of limbo (Haas 2020).

Our three key findings fuel the ongoing discussion on 'cultural competence', and its incoherent definition and operationalisation. Our results contribute to contesting the practice of cultural competency: critics have argued that 'culture' cannot be reduced to technical skills that can be acquired (Kleinman and Benson 2006; Pon 2009). They emphasize the role of the cultural background of the practitioner in multicultural treatment settings. Through their familiarity with the explanatory models of their patients with a similar background, a trusted patient-practitioner relationship is facilitated. However, due to their training in a dominant biomedical system, also these professionals might prioritize the Western explanatory model in their practices. Participants of SSA descent in our study applied an integrative practice that linked both explanatory models, but with the final aim to guide their patients towards a Western treatment; e.g. to take psychiatric medication. This can maintain top-down power relationships in which Western practices remain the standard (Kleinman and Benson 2006), which can have adverse consequences (Marsella 2011). Dealing with cultural differences is a complex matter: solely focusing on professionals' cultural competency ignores the impact of external health environment factors on health (Marsella 2011). Study participants acknowledged this limitation and argued for a more holistic approach with attention to culture-specific aspects, such as community care. Wendt and Gone (2012) propose a 'cultural commensurate' approach in which attention is not merely given to the capacities of the professionals, but to how psychotherapeutic interventions are culturally

constituted. The findings of our study are in line with this reasoning, however, the topic needs further deepening.

Limitations and suggestions for further research

Our study is the first, to our knowledge, to investigate perceptions and practices of Belgian healthcare professionals regarding to the explanatory models of (mental) health among their patients of SSA descent. While the results help to understand how cultural aspects play a role in healthcare practices, results should be interpreted in the light of certain limitations. Firstly, participant selection was directed to professionals working with newcomers of SSA descent, and a special focus of the study was to compare between professionals with and without a similar cultural background. A specific group of professionals might thus be represented, especially since cultural diversity among Belgian healthcare professionals is rather limited.

Secondly, the research findings represent subjective interpretations of the participants and are therefore difficult to generalize among the broader public of healthcare professionals. Additionally, the experiences and perceptions mentioned are related to a heterogenous group of patients with different socio-economic, social and migration backgrounds.

This study builds on earlier recommendations to focus on the (care) needs of ethnic minorities to close the treatment gap in mental healthcare in Belgium (Meys et al. 2014). The results provide valuable insights that highlight a fruitful area for further work. As the field is understudied in Belgium, some suggestions for future research are to examine how cultural differences are experienced by newcomers of SSA descent; to examine the role of explanatory models on (mental) health of health care professionals in general and how this fuels their practices. Additionally, a systematic health system analysis would be of added value to study the role of cultural aspects in the Belgian healthcare and reception system.

4.3 **Article 3**: Impacts for mental health care practices from juxtaposing perspectives on mental health and healthcare provision from healthcare professionals and East-African migrants in Belgium.

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4.3.1 Abstract

Migrants and ethnic minorities are at a higher risk of developing mental health issues due to migration-related stressors. However, several barriers hinder migrant populations to seek and receive appropriate mental healthcare including language barriers, cultural differences, and unfamiliarity with the healthcare system. At the same time, healthcare professionals have their own perspectives and approaches to mental health care provision, which may not always align with those of their patients. This study explores the impact of these contrasting perspectives on mental health care practices for East-African (EA) migrants in Belgium, and healthcare professionals with and without a similar migration background. A qualitative interview-based study was conducted using reflexive thematic analysis. Results show differences in how participants define mental health and interpret mental health complaints and issues. EA-migrants preferred informal and religious healthcare-seeking over conventional Belgian mental healthcare, which contrasted with the understanding of mental health held by healthcare professionals adopting a biopsychosocial approach. Those professionals with a similar migration background incorporated both views in their practice, while the other group applied culture-sensitive practices to overcome culturally related barriers. Both migrants and professionals highlighted the detrimental effects of the Belgian reception and integration system on migrant mental health. We provide concrete recommendations for enhancing access to mental health care services and to identify areas for improvement in mental health care practices in Belgium for EA-migrants.

4.3.2 Introduction

Migrants and ethnic minorities are at larger risk for developing mental health issues (Missinne and Bracke 2012; Purgato et al. 2021; Turrini et al. 2017). While these population groups are sometimes described to be mentally healthier at arrival in the country of destination compared to the general population because of their 'psychological hardiness' (Dhadda and Greene 2018), several studies indicate that this 'healthy migrant effect' in terms of their mental health declines the longer they stay

(Lindert et al. 2008; Priebe et al. 2016; Salami et al. 2019). Migration- and integration-related social determinants of health, such as economic hardship, legal procedures, uncertainty towards the future, experience of racism and discrimination and many others, may deteriorate a migrant's mental health status (Derr 2016; Lindert et al. 2008; Phillimore and Cheung 2021; Priebe et al. 2016). Studies show a high prevalence of mental health issues among international migrants: a meta-analysis claimed an aggregated prevalence of 15.6% of depression (Foo et al. 2018) and review studies indicate between 30-40% of refugees and asylum seekers to suffer from depression, anxiety or post-traumatic stress disorders (Blackmore et al. 2020; Turrini et al. 2017). However, despite these high prevalence numbers, many barriers hinder access and use of mental health services among migrant groups (Colucci et al. 2012; Kim et al. 2021). In addition to socio-economic, linguistic, legal and other barriers, sociocultural barriers have also been identified, frequently originating from cultural disparities in explanatory models of mental health between the migrant populations groups and providers within a healthcare system (Derr 2016; Kirmayer et al. 2007; Kleinman and Benson 2006; Kleinman et al. 1978).

Mental health is a socially and culturally constructed concept of what it means to be mentally healthy and unhealthy, and of appropriate treatments or interventions (Amuyunzu-Nyamongo 2013; McCann 2016; Teferra and Shibre 2012). People's healthcare-seeking behaviour is influenced by a person's understanding of mental health (Fauk et al. 2021). Studies suggest that in the Global South, non-medical healing practices such as informal support and religious rituals are more common, whereas in the Global North, people seek treatment in biologically or psychosocially oriented manner (Constantine et al. 2004; Muga and Jenkins 2008; Teferra and Shibre 2012; Fernando 2002; Kirmayer, Guzder, and Rousseau 2014). Culture-related factors such as concerns about medication or a mistrust of biomedical healthcare impede migrants further to seek healthcare (Ayalon and Alvidrez 2007; Fauk et al. 2022; McCann et al. 2016). Additionally, migrants tend to prioritize general healthcare over mental healthcare (Giacco et al. 2014; Lu et al. 2020), because of a holistic or culturally specific understanding of mental health (Ventevogel et al. 2013; Olsen and Sargent 2017; Teferra and Shibre 2012; Choudhry et al. 2016). Healthcare professionals in the Global North are likely to hold a clinical understanding of mental health rooted in biomedical models (Olsen and Sargent 2017; Teferra and Shibre 2012). Differences in explanatory models of mental health between migrants and healthcare professionals can therefore lead to miscommunication and misunderstandings (Giordano 2014; Sargent and Larchanché 2009). In addition, social and cultural processes affect people's perceptions about mental health intervention's effectiveness (Kirmayer et al. 2014). As a consequence, some migrants may be dissatisfied with health consultations and the biomedical treatments they are offered for various reasons: they may experience these approaches as neglecting social and community contexts, may be disappointed with an unexpected outcome of the treatment or may associate a biomedical treatment with a greater stigma

(Bracken, Giller, and Summerfield 1995; Henderson et al. 2014; Kumar et al. 1996; Ojagbemi and Gureje 2021; Salami et al. 2019). On the other hand, from a clinician's perspective, cultural differing interpretations of what is considered mental health indeed matters for accurately treating people (Kleinman and Benson 2006). A person may be expressing behaviour that is considered a mental illness in one cultural context, but may understand and respond to it differently according his or her own cultural norms (McCann 2016).

Literature that describes simultaneously both viewpoints of the patient-provider relationship in mental health settings is limited (Ahmadinia et al. 2022; Fauk et al. 2021). The current study, therefore, juxtaposes the understanding of mental health among first-generation East-African (EA) migrants and healthcare professionals in Belgium and considers its implications for mental healthcare provision. There are several reasons why the focus on EA-migrants is particularly relevant. Firstly, EA-migrants constitute a significant and growing portion of the Belgian population, with most of them coming from countries with a Belgian colonial history such as DR Congo, Rwanda, and Burundi (Demart et al. 2017). Furthermore, individuals with an African background who migrate to Belgium often settle permanently. Secondly, evidence has shown that migrant groups of African descent face various forms of racism and discrimination more frequently than other migrant groups (Centrum voor gelijkheid van kansen en voor racismebestrijding 2011, Demart et al. 2017, Tortelli et al. 2014). Due to their often difficult migration paths and precarious living situations in their destination countries, they are among the most vulnerable groups for developing mental health problems (Pannetier et al. 2017).

Few research has compared providers with or without a similar migration background, while this might give important insights (Said et al. 2021). The involvement of culturally competent providers, providers with either a similar migration background or thorough understanding of the particular past and present experiences of migrants can increase the acceptance and access to mental health services (Fauk et al. 2021, 2022; Levesque, Harris, and Russell 2013). The greater the cultural distance between patient and healthcare professional, the more likely miscommunication or dissatisfaction may occur (Said et al. 2021). Bicultural providers can overcome these hindrances and provide valuable insight in how to approach culturally diverse communities (Claeys et al. 2022). Therefore, this study aims to fill this gap by examining and contrasting the understanding of mental health among (mental) health care professionals with or without similar migration backgrounds to those of EA-migrants. We aim to answer the following research questions: (1) what are differences in mental health understanding between these participant groups, (2) what are the implications for (mental) healthcare practice and (3) how do the participants evaluate the culturally-sensitivity within the Belgian healthcare system?

4.3.3. Methods

Study Design

An interpretative, interview-based qualitative research study design was chosen to gain in-depth understanding of the perceptions and experiences of both professionals and migrants. We triangulated data gained from in-depth interviews with first-generation EA-migrants and healthcare providers.

Recruitment Procedure

Recruitment of migrant participants: we recruited a nonclinical, community sample of 30 EA-migrants. Candidates were purposively selected via key organisations, gatekeepers and informal contacts within the professional and personal networks of the authors. The selection criteria were: to be a first-generation immigrant of East-African descent (i.e., Burundi, Congo DR Congo, Djibouti, Eritrea, Ethiopia, Kenya, Uganda, Rwanda, Somalia and Tanzania) and over 18 years old. The sampling objectives were to keep a balance in terms of gender, age and length of stay in Belgium to allow comparisons across these factors. Recruitment was stopped when data saturation was reached, with no further emergence of new information.

Recruitment of professionals: as healthcare professionals attend to a broader range of patients beyond EA-migrants, the recruitment criteria were centred on SSA-migrants. We selected 22 respondents according to their professional position: working in the Belgian healthcare sector and having members of the sub-Sahara African (SSA) community in Belgium as their patients, or in civil society organisations dedicated to supporting SSA-migrants in navigating the healthcare system. We aimed at purposively recruiting a balanced sample in terms of cultural background to study differences in explanatory models of mental health among the professionals and the influence thereof on their practices. Hence, both professionals of SSA and Western-European descent were selected. Candidates were selected using different entries in (mental) health organisations, institutional affiliations and civil society organisations, as well as personal networks from the authors. Candidates were contacted with an invitation to share their individual stories on the topic or with a question to spread the inquiry within their own network. Through further snowball sampling rounds, more participants were recruited until data saturation was reached.

Data Collection

Data collection took place in June-October 2020 (professionals) and June – December 2021 (EA-migrants). We considered individual in-depth interviews as the best-suited methodology to generate a

comprehensive, thorough exploration on the study topic (Denzin and Lincoln 2011). The first author conducted all interviews, allowing for consistency in interview methodology. Interviews were conducted in Dutch, French or English. Since the interviews with the professionals were carried out during the Covid-19 pandemic, preventive measurements impeded physical meetings at certain periods of time. Sixteen interviews were conducted online through a platform of preference of the interviewee (Zoom, Jitsi Meet, Skype). All interviews with EA-migrants were held in person at a place chosen by the participant, to ensure the feeling of confidentiality and trust among the interviewees. Written consent was obtained from all participants. Interviews were audio-recorded, except for one interview with a participant that preferred not to be recorded. In this specific case, detailed interview notes were taken. Before starting the interview, participants filled out a socio-demographic form.

We created different open-ended interview topic guides for each participants group. The interview guide for professionals included questions on the interviewee's background, views on their own and their patients' explanatory models on (mental) health, professional experiences, as well as their reflections on cultural competency.

Data coding and Analysis

We applied a reflexive thematic analysis with an experiential orientation, i.e. to grasp the meaning given by the participants to a certain phenomenon or concept (Braun and Clarke 2006; Byrne 2022). Analysis was conducted using a data-driven approach (Byrne 2022). The first author coded and analysed the data, applying the six-phase thematic analytical process in a flexible manner (Byrne 2022). First, familiarisation with the data was achieved through the verbatim transcription of the audiotaped interviews. The transcripts were imported in the qualitative data analysis software, NVivo 12. Initial codes such as "cultural differences" or "mental health conceptualisation", etc. aimed at identifying commonalities and discrepancies in perceptions and practices of the participants, were generated inductively. A first version of a data-driven codebook was developed. Next, overarching themes such as "implications for healthcare" were identified and the codebook was further scrutinized. The codebook was reviewed by the last author. The first and last author (LVP) explored and discussed interpretations of the data throughout the analytical process aiming to reach richer understandings of the data and to resolve any possible inconsistencies (Byrne 2022). In an iterative process, the codebook was further developed with organising the respective subthemes under relevant themes, and labelling the final themes with their respective narratives

Using specific technological features of NVivo 12, e.g. the 'memo links' or 'case classifications', further data analysis was supported to formulate potential relationships between themes or make comparisons between participant groups.

Ethics and Researcher Positionality

The study was ethically approved by the Ethics Committee for the Social Sciences and Humanities of the University of Antwerp (SHW_20_48). All participants received extensive explanations on the aim and process of the research. After pseudonymized transcription of the audio recordings, the latter were deleted. The interviewer was a young, white female of Belgian origin. The participants as well as the researcher herself might have projected assumptions associated with this profile and underlying power dynamics. While influences of interviewers' and research characteristics can never be excluded during data collection, we aimed to minimize this effect through using the interviewer's previous professional experience with the topic, methodology and population of interest, as well as through methodological choices (e.g. extensive informed consent, diversity in recruitment of participants, data collection until data saturation).

4.3.4 Results

Participants' Characteristics

Professionals

The study included a diverse group of 22 professionals, varying in terms of gender, age, professional background, and migration background. Seven of the participants worked in the regular healthcare system as general practitioners, health-promoting professionals in primary care, or as psychologists or psychiatrists in specialist care. Fifteen participants worked in civil society organizations or state-funded projects that provide support for socially vulnerable people or those with a migration background and healthcare issues. Seventeen participants had more than five years of experience in the healthcare sector. Eleven of the participants were female. Ten of the participants were of sub-Saharan African descent, originating from Burundi, Cameroon, Congo, Ghana, Kenya, Rwanda, and Uganda, with nine being first-generation migrants and one a second-generation migrant. Twelve participants did not have a migration background.

East-African migrants

The study included a total of 30 participants, consisting of 16 women and 14 men. Their ages ranged from 21 to 65, with a median age of 37.5 years. The participants were from Burundi, DR Congo, Djibouti, Eritrea, Kenya, Rwanda, Somalia, Tanzania, and Uganda, and had varying durations of living in Belgium, ranging from one to 29 years, with a median of 6 years. Of these participants, 20 had temporary residence status, while two arrived through family reunification, and seven had permanent residency of

whom six had acquired the Belgian nationality. Regarding education, 16 participants had completed higher education, 12 had attended secondary school, and one lacked formal education. Nearly all participants identified as religious, with 29 indicating the importance of religiosity on a scale of 1 to 10, with an average score of 8.8, indicating a high level of importance.

Mental Health Understanding

The concept of mental health was understood differently by healthcare professionals and EA-migrants and details have been discussed in previous publications (Apers et al. 2023; Apers et al (manuscript under review)). In a nutshell, professionals considered mental health to be a distinct part of overall health, with a wide range of potential issues or disorders. On the other hand, migrant participants mainly associated mental health with severe deviant behaviour, which they often referred to as "being crazy." Other issues, such as emotional disturbances or moderate deviant behaviour, were seen as part of general health issues, or “the hardship of daily life”. Migrant participants’ understanding of mental health was also related to the perceived prevalence of mental health issues. They argued that the prevalence was lower in their countries of origin, partly because they did not consider feelings of sadness or suffering as mental health problems. They also attributed the lower prevalence to their culture of origin, mentioning protective factors such as their slower way of living and supportive social dynamics among community members.

Causes of mental health problems

EA-migrants argued that, in their region of origin, mental health issues are considered to arise from substance abuse or problematic or changing social relationships, such as divorce or loss. Many of them attributed mental illness to religious reasons , and some also to supernatural causes. In contrast, the professionals often referred to contextual or biomedical explanations within a biopsychosocial health model and used diagnostic terms such as "depression" and "schizophrenia". However, these terms were considered too stigmatizing by the EA-migrant participants, who instead used phrases such as "challenges" to describe emotional difficult situations.

Interestingly, the attribution of causality became more aligned between both groups when discussing mental health issues among EA-migrants in Belgium. Both groups considered mental health issues to be caused by post-migration stressors related to social, contextual, and structural factors in Belgian society. Administrative hurdles such as obtaining a residence permit, decent housing, or work intensified the difficulties of social integration and created feelings of not belonging. Many EA-migrant participants emphasized that the absence of a social network and the aloofness of Belgian citizens caused feelings of loneliness.

The domino effect of the detrimental integration context on migrants' mental health

Both migrant participants and professionals considered the Belgian reception and integration system as extremely harmful for migrants' mental health status. They argued that the social and administrative hurdle of integrating oneself in the Belgian society caused mental health issues. For instance, different aspects of the residence application procedure for migrants were mentioned as detrimental: the length of the procedure, the uncertainty of the outcome, the societal exclusion during the procedure, and so forth.

> *"And you have to understand that the whole system is a system of very heavy oppression which has tremendous effects on the mental state of people. […] The way we deal with migration and integration, looking at it from a medical or psychic perspective, has to be completely overhauled. The impact of people who do not get granted residence, the impact of [living in] a closed [reception] centre, and so on … It is very heavy."*
>
> *(Male professional, of Belgian descent, working in a non-profit organisation)*

Furthermore, they claimed these procedures to differ according to the grounds on which people apply for residence, e.g. asylum seekers vs. people who migrate for study or work, causing large inequalities among migrants on what support they are entitled to. Depending on their legal status, migrants had no or limited access to integration courses organized by Belgian government actors. Migrant participants argued therefore that they received little information on how to navigate in the Belgian system, ranging from traffic rules to the organization of the healthcare system. In some of their cases, this ignorance fuelled social exclusion, discrimination and racism.

> *"You know, a friend of me he was given a fine for standing where the busses park, the police fined him for, I think, obstruction of the busses. So those are things that we don't know…. I remember in one of the meetings, one said "you guys need to give us information on how the Belgian system works" and the person who was there said "no, we are not here to integrate you to the Belgian system, because we want you to go back home, we don't want you…"*
>
> *(Female respondent, Kenyan descent, since 2020 in Belgium)*

Participants claimed that their difficult socio-economic position at the start of the integration process has a domino effect further in their lives. Migrant participants experienced financial difficulties, in combination with social integration struggles and discriminatory practices on the housing and labour market, as a breeding ground for mental health problems.

> *"I'm sorry, pure and simple: it's racism, it's discrimination. And it's not discrimination from employers, it's discrimination.. that is in the system... because if you deny equivalence to*

someone who... to a person who has studied and who was respected in his country... he goes down to hell if I can say like that, even though he is in Europe, he lives very badly and psychologically this person is in bad shape, he is not even respected by people in his community who respected him before, when he was in his country…"

(Female, Rwandan descent, since 2012 in Belgium)

These frequently reported experiences of social exclusion, discrimination and racism caused or intensified existing mental health problems, according to the EA-migrant participants.

Implications for healthcare behaviour and practice

The different views on mental health had significant implications for EA-migrants' healthcare seeking behaviour within the Belgian healthcare system, as well as for the nature of the (potential) therapeutic relationship between these migrants and healthcare professionals.

EA-migrants' healthcare-seeking behaviour

Cultural interpretations of what mental health issues are directed EA-migrants' healthcare-seeking behaviour. Some issues considered to be mental health-related by healthcare professionals, were seen as general health issues or non-health related by EA-migrants, such as extensive feelings of loss, sadness or anxiety. Furthermore, a main barrier to seek mental healthcare was the culturally-related injunctive norm to refrain from openly talking about emotions or problems. Migrant participants argued that in their culture, people are expected to solve issues by themselves. According to those participants, someone should not bother other people with their encountered difficulties, especially not strangers, as everyone encounters struggles in life. Seeking help would be a sign of weakness, it could cause community members to gossip and could therefore threaten a person's position in the community, and by extension even that of their family.

"*Everyone knows each other here, everyone talks to each other, gossiping too, so they don't dare [to seek healthcare]. 'It's my problem, no one should know except people close to me'.*"

(Female, Ethiopian descent, since 2015 in Belgium)

Most migrant participants in the study internalized this (self-)stigma surrounding mental health, leading them to view psychological help as unappealing. Many saw it as simply "talking about emotions with a stranger" and claimed to have other priorities, such as ensuring their children were properly fed. They believed that their issues were structural in nature and required practical solutions, such as proper housing, which could not be provided by a mental healthcare professional. Additionally, they associated mental healthcare with a medicalized approach and lacked trust in pills or other medication.

These barriers to mental healthcare were also noted by the healthcare providers. They argued that many African patients are reluctant to seek support due to differing causal beliefs and unfamiliarity with the Belgian health system. The professionals believed that cultural habits persist, such as only seeking help in a late stage or using alternative health-seeking behaviours. Professionals with a similar migration background felt that they had a better view on these alternative health-seeking strategies, which were reported by the EA-migrant participants. In first instance, EA-migrants said that help was sought informally with friends and family, or in their religious community. Both participant groups considered religion to be a crucial factor in how migrants cope with mental health issues, finding relief and support through prayer and participation in religious ceremonies. Some migrant participants for instance reported to seek support from their healer or pastor in their country of origin through platforms like WhatsApp.

EA-migrants who were familiar with the dominant discourse on mental health in Belgian healthcare held a more positive view towards conventional mental healthcare. Younger respondents, those who had previously lived in an urbanized region or worked in the official healthcare system in their country of origin, were more inclined to seek Belgian mental healthcare. Some participants reported a change in perceptions on mental health as they integrated and were exposed to different mental health conceptualizations, describing greater acceptance of Belgian mental health approaches as they "had learned what mental health entails". They viewed the dominant Belgian mental health understanding as superior to the approach in their country of origin, while others saw both the Belgian as the East-African discourse as different understandings to mental health, but equal to each other.

Therapeutic alliance between professional and EA-migrant

While both groups acknowledged the other's perspective, they attached different interpretations to it. This also had implications for the (potential) therapeutic alliance between professional and EA-migrant. Some healthcare professionals, both with and without migration background, viewed the limited mental health knowledge of EA-migrants on the Belgian mental health conceptualisation as cultural ignorance or illiteracy. This influenced their treatment approach. For example, they argued that by using psycho-education EA-migrants could learn how mental health is conceptualized in Belgium, which, according to them, is crucial for effective mental health care.

> *"What I usually do in the first interview is to answer their questions of "What does a psychologist do according to you?" "Does that exist where you come from?" and "How do you feel about psychological difficulties or stress-like things in your culture?". Then I explain how we see that here and I explain how I usually work. It does help to make the talking easier afterwards to know what to expect and what not to expect."*

(Female professional, second-generation EA-migration background, working in a psychotherapy group practice)

Others, following an ethno-psychiatric approach, regarded the varying mental health understandings as coexisting interpretations and did not want to reinforce a Belgian approach on migrant patients with a different understanding of mental health.

"A big no. For what? Because, of course, we have our cultural references, of course they can be useful, but we never try to impose them. We do not think that our representations are more relevant than theirs, on the contrary. Even if sometimes we believe it. Psychoeducation is very far from us, I recognize the relevance in certain cases, but we do not do that."

(Male professional, Belgian descent, working in a non-profit organisation)

Professionals without a migration background applied a range of approaches to overcome cultural barriers, including psycho-education, involving community members, or co-constructing a therapeutic practice with their patients.

Regardless their treatment methodology, most migrant participants, however, preferred professionals who share their cultural background, as they believe them to be more understanding. This sentiment was also experienced by professionals with a migration background, who felt that they were more trusted and received greater cultural recognition from migrant patients. Professionals with a migration background argued that their cultural knowledge helped them better understand their patients. Familiarity with a patient's explanatory model of mental health made it easier to interpret issues, avoid language and conceptual misinterpretations, and overcome stigma.

"*So the Belgian psychologists… it's just, they don't understand. For example, if a patient stops taking his or her medication because a pastor told her that prayer will heal her, a doctor will never understand… but I do! I do understand it, because I know how people really live in this spiritual power, it is real. I mean, you can deny it, you can make it ridiculous, but it is real for the people. They really… this is the core of their belief, so… you have to take this patient by him or her from what she beliefs, and connect, it can work together*."

(Male professional, Ugandan descent, working in a state-funded project)

However, the stigma surrounding mental health also created distrust among some EA-migrants, who feared the possibility that professional secrecy would not be maintained by professionals from a similar background.

Perceptions on cultural sensitivity within Belgian healthcare system

Both migrants and professionals argued that the Belgian healthcare system does not adequately address cultural differences in mental health understanding. They denounced a lack of representation of cultural diversity among healthcare personnel and an insufficient provision of cultural sensitivity training. Professionals without a migration background expressed that they were not equipped to provide appropriate care and stumbled upon limitations in their own explanatory model of mental health. Some professionals argued that the healthcare system does not create a supportive platform for applying a holistic approach, while this would benefit the treatment of their migrant patients.

Many participants of both groups argued that the healthcare system as a whole should focus on diversification. First, professionals argued that in education and training of future professionals, cultural sensitivity should be a core topic. Second, both participant groups claimed that diversifying the personnel within the healthcare system would increase recognizability and reduce barriers. Third, they suggested a more holistic approach within the treatment offer, in which cultural communities can be involved, leaving room for religious or cultural practices.

Many of the migrant participants navigated the healthcare system with the informal help from friends, family or community members, or with the support of social assistants from non-governmental organizations. Therefore, migrant participants argued that an intermediary person between the community and the healthcare system would increase trust in the healthcare system. Both professionals and migrant patients argued that involvement of migrant communities would lower barriers to mental healthcare and increase conventional healthcare utilization.

> "*In order to reach the migrant communities and African communities here in Belgium … work with their community leaders, religious leaders … Because they are the ones, they are the first contact with the migrant communities, and they are believed, they are trusted. If they are saying "get involved", then that is true. … The migrant communities here do have mental health issues, but they have either not identified them or if they have identified them, they are not acknowledging, and if they have identified and acknowledge it, they are not seeking help, … This holistic way of involving the people they trust more, to introduce the topic… could be a good health system.*"
>
> *(Female, of Ugandan descent, 55 years old, since 2001 in Belgium)*

A large part of the professionals emphasized that while considering cultural factors is important within the mental health practice, they may not be determinative for a treatment implementation. Therefore, they acknowledged the importance of a client-centred approach, taking the larger context into account

rather than solely focusing on cultural background. Also, migrant participants argued for an adapted healthcare, in which treatment procedures can be modified according to the specific context of the migrant patient.

Both participant groups talked about the need for a larger societal approach to reverse the detrimental mental health effects of migrants' integration processes. According to them, policies should be put in place to facilitate and accelerate the application procedures and shorten the period of residence uncertainty migrants have to face. They suggested that by reducing the negative impact of integration procedures and adopting a broader approach beyond the healthcare system would have a preventative impact on mental health among migrants. Social integration and support was deemed a protective factor for mental health issues by both migrants and professionals. Therefore, they argued that all migrants should have immediate access to the integration courses that are organized by the Belgian government, regardless of their legal status. This would allow migrants to learn an official Belgian language and acquire important knowledge to integrate directly after their arrival in Belgium.

4.3.5 Discussion and Conclusion

Our study aimed to answer three research questions: 1) what are differences in mental health understanding between these participant groups, (2) what are the implications for (mental) healthcare practice and (3) how do the participants evaluate the culturally-sensitivity within the Belgian healthcare system?

First, we provided insight into the varying understandings of mental health among healthcare professionals and EA-migrants in Belgium. These findings are consistent with previous research, which has documented African migrants' beliefs and attitudes toward mental health, often linking mental illness with overt aggression or depictions of "acting crazy" (Fauk et al. 2021; Salami et al. 2019; Teferra and Shibre 2012; Ventevogel et al. 2013). Similarly, distinctions in causal attributions between professionals who refer to biopsychosocial causes and migrants who hold social, religious or supernatural explanations have been reported in earlier literature (Amunga 2020; Olsen and Sargent 2017; Teferra and Shibre 2012). Our study illustrated that aligned causal explanations of both participants groups consider the importance influence of the post-migration context on mental health issues. Both participant groups attributed mental health issues among migrants to post-migration and integration stressors that migrants experience in Belgian society.

Second, our findings suggest that the differences in mental health understanding between EA-migrants and healthcare professionals impacted on how EA-migrants navigated the healthcare system, and influenced the nature of the relationship between EA-migrant and professional. Indeed, previous

studies have shown that African migrants found it difficult to seek help for their problems in the mental health care system, primarily due to their conceptualizations of mental health (Knipscheer and Kleber 2008; Salami et al. 2019). Migrants prefer seeking support from family, friends, or spiritual leaders over mental health services (Amuyunzu-Nyamongo 2013; Fauk et al. 2021; Kewley 2018). Hesitation to disclose their weaknesses, fear of not being taken seriously, and distrust in healthcare providers impede migrants to seek conventional healthcare (Fauk et al. 2021, 2022; Giacco et al. 2014). Healthcare professionals, therefore, use culturally sensitive practices or a holistic approach, such as exploring cultural references in patient narratives or involving community and family support systems, to foster a good therapeutic relationship and overcome different understandings in their healthcare practice (Gopalkrishnan 2018; Mollah et al. 2018). Professionals of similar cultural background report better rapport with migrant patients due to their nuanced understanding of their patients' cultural, linguistic, and systemic challenges (Fauk et al. 2022; Salami et al. 2019). However, stigma surrounding mental health within their cultural communities also creates distrust and fear of violation of the professional secrecy of professionals with a similar background (Sandhu et al. 2013).

Third, we illustrated clearly that dealing with cultural differences in mental healthcare practice is a complex issue that goes beyond the therapeutic alliance (Marsella 2011). While both professionals and migrant participants in our study were aware of differences in explanatory models of mental health, they felt that the provision of cultural appropriate care was complicated as the Belgian healthcare system falls short in facilitating such care. These systemic barriers in health systems have been described in other contexts (Claeys et al. 2022; Desai et al. 2021; Salami et al. 2019). It is important that the health care system provides an environment that contributes to the professionals' abilities to offer adequate care. It has been shown that involving culturally diverse professionals and community members can increase the acceptability and access to mental health services for culturally diverse communities (Apers et al. 2023; Fauk et al. 2022; Salami et al. 2019). These professionals are able to approach communities in culturally appropriate ways, reduce barriers to healthcare and improve health outcomes among patients. Involving cultural and religious organizations can play a crucial role in connecting migrants with the conventional healthcare system (Giacco et al. 2014), can increase effective dissemination of information of mental health services (Fauk et al. 2022), increase the referral of migrants to mental health services (Fauk et al. 2022; Kim et al. 2021), overcome cultural stigma (Kim et al. 2021) and better address their complex needs (Salami et al. 2019). Within the healthcare system, a better integration of mental and primary healthcare, could help to overcome the initial cultural distinctions of what is considered a mental health problem (Giacco et al. 2014).

However, as indicated by our study participants, to address mental health issues and improve healthcare access for migrants, initiatives should extend beyond the healthcare system. The specific integration

context that migrants face, increases their vulnerability and therefore, the broad range of social, economic, and integration challenges faced by these populations should be addressed (Priebe et al. 2016). Unemployment, temporary residence status, and poor social integration are factors associated with increased mental health suffering among migrants (Giacco et al. 2014; Voglino et al. 2022). Facilitating the socio-economic integration of migrants is a key strategy for reducing the incidence of mental health issues and improving mental health outcomes (Priebe et al. 2016). Ideally, a culturally appropriate (mental) healthcare crosses borders to other sectors, such as social care, housing and labour to minimize the harmful effect of social determinants related to the migration and integration context (Kim et al. 2021; Salami et al. 2017, 2019).

In conclusion, our study illustrates differences in mental health understanding between East-African migrants and healthcare professionals. Interestingly, while causal explanations of migrants' mental health problems in their countries of origin differ between migrants and professionals, explanations are more similar when the role of the post-migration context is discussed. Our results also show that differences in mental health understanding impact EA-migrants' mental health seeking behaviour, professionals' treatment approaches and the relationship between both providers and their patients. Addressing cultural differences in mental health understanding is essential to render healthcare services more inclusive. Incorporating holistic approaches that involve migrant cultural and religious communities is crucial in increasing trust and improving mental healthcare approaches directed towards migrant populations. Furthermore, our results contribute to the evidence that the specific migration- and integration-related context increases the risk for mental health issues among migrants. Effective mental health care for migrant populations requires a multi-faceted approach that addresses the detrimental effect of their socio-economic living context. This may involve collaboration between the mental health care, social care, housing and labour sector.

4.4 **Article 4**: Interventions to improve the mental health or mental well-being of migrants and ethnic minority groups in Europe: a scoping review

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4.4.1 Abstract

In Europe, migrants and ethnic minority groups are at greater risk for mental disorders compared to the general population. However, little is known about which interventions improve their mental health and well-being and about their underlying mechanisms that reduce existing mental health inequities. To fill this gap, the aim of this scoping review was to synthesise the available evidence on health promotion, prevention, and non-medical treatment interventions targeting migrants and ethnic minority populations. By mapping and synthesising the findings, including facilitators and barriers for intervention uptake, this scoping review provides valuable insights for developing future interventions. We used the PICo strategy and PRISMA guidelines to select peer-reviewed articles assessing studies on interventions. In total, we included 27 studies, and synthesised the results based on type of intervention, intervention mechanisms and outcomes, and barriers and facilitators to intervention uptake. We found that the selected studies implemented tailored interventions to reach these specific populations who are at-risk due to structural inequities such as discrimination and racism, stigma associated with mental health, language barriers, and problems in accessing health care. The majority of interventions showed a positive effect on participants' mental health, indicating the importance of using a tailored approach. We identified three main successful mechanisms for intervention development and implementation: a sound theory-base, systematic adaption to make interventions culturally sensitive and participatory approaches. Moreover, this review indicates the need to holistically address social determinants of health through intersectoral programming to promote and improve mental health among migrants and ethnic minority populations. We identified current shortcomings and knowledge gaps within this field: rigorous intervention studies were scarce, there was a large diversity regarding migrant population groups and few studies evaluated the interventions' (cost-)effectiveness.

4.4.2 Introduction

Migrant and ethnic minority populations are at greater risk for mental health problems than the general population in Europe and the European Economic Area (EU/EEA) (Carta et al., 2005; Fazel et al.,2005; Missinne and Bracke, 2012; Ekeberg and Abebe, 2021; Purgato et al., 2021). While it has been suggested that some groups of migrants in certain contexts may have a health advantage over nationals upon their arrival (Dhadda and Greene, 2018), this 'healthy-migrant effect' appears to vanish with longer duration of residence due to increasing health inequalities. Evidence for a decline in migrants' mental health over the years after their arrival is convincing (Elshahat et al., 2021). Several studies show a higher prevalence of mental disorders such as post-traumatic stress disorder (PTSD), anxiety and depression among these populations, as well as of substance abuse and severe mental illnesses, such as psychosis in comparison with the majority population in the countries of residence (Fazel et al., 2005; Missinne and Bracke, 2012; Nosè et al., 2017; Turrini et al., 2017; Foo et al., 2018; Hynie, 2018; Ekeberg and Abebe, 2021).

Migration trajectories and integration processes tend to be a psycho-social process of loss and change, associated with several mental stressors and suffering (Bhugra, 2004; Carta et al., 2005; Derr, 2016). Migration drivers such as poverty, violent political conflicts, and climate-related disasters will continue to trigger global migration (O'Malley, 2018). The complex and interrelated combination of social and structural determinants pre-, during and post-migration impact migrants' mental health (International Organization for Migration, 2006; Spallek et al., 2011; World Health Organization, 2022). Difficult socio-economic circumstances in their countries of origin such as limited access to education, employment and healthcare, economic disruptions, individual or family-related stressors might have affected their health status prior to and upon migration (Davies et al., 2010; Priebe and El-Nagib, 2016). Migrants may face many challenges before and during their migration trajectory: some migrant groups are exposed to violence and trauma, often in the form of human rights violations (Priebe and El-Nagib, 2016; Lindert et al., 2017; Purgato et al., 2021). After arrival, resettlement stressors, such as difficult socio-economic and living circumstances, complex legal residence procedures, detention procedures, and experiences of discrimination and racism, amongst others, may negatively affect their mental health (Priebe and El-Nagib, 2016; Lindert et al., 2017; Nosè et al., 2017; Von Werthern et al., 2018).

Similar mental health vulnerabilities have been observed among ethnic minorities born in European countries (Myers, 2009; Spallek et al., 2011; Borrell et al., 2015; Ikram, 2016; Hynie, 2018). The social determinants that impact migrant's health before, during and after migration may also affect their offspring and subsequent generations (Spallek et al., 2011). Different genetic factors, cultural beliefs and health behaviours persist over generations, and the socio-economic conditions of parents can determine the health situation of their children (Spallek et al., 2011). Migrant descendants show a

greater likelihood of developing mental disorders such as PTSD, as trauma can be transmitted to later generations through psychosocial mechanisms within the parent-child attachment and intra-family communication style (Sangalang and Vang, 2017; Silwal et al., 2019). The complex issue of trauma transmission is not limited to family ties. Also indirect experiences of racial discrimination, racial profiling, and racism were shown to affect the mental well-being among some ethnic minority groups (Cénat, 2020).

The evidence on the particular causes and circumstances of migrant groups' heightened vulnerabilities to ill mental health, gives reason for specific, targeted interventions on mental health promotion, prevention, and treatment, apart from interventions targeting the general non-migrant and/or ethnic majority population (Uphoff et al., 2020). Migrants and ethnic minorities might experience language, cultural and structural barriers that complicate access to regular mental healthcare (Uphoff et al., 2020) and thus they may make less use of health care services or use services in a different manner (Graetz et al., 2017). Most of the target-group specific interventions on mental health, however, seem to be directed to the specific subgroup of refugees and asylum seekers, who have specific needs given their specific migration history, distinct legal status, and access to health systems (Nosè et al., 2017; Lebano et al., 2020; Uphoff et al., 2020; Purgato et al., 2021). An overview of interventions focusing on refugees and asylum seekers can be found in the Cochrane Library (Uphoff et al., 2020) and further in this special issue to be published in the journal. Other migrant groups, such as economic migrants, as well as ethnic minorities who are subject to similar mental health risks, are not considered in those reviews.

Additionally, intervention reviews rather focus on those populations already diagnosed with a mental health condition and little emphasis is put on the prevention of mental health problems or promotion of mental well-being in those groups at increased risk (Purgato et al., 2021). However, prevention strategies and mental health promotion approaches are essential to ensure psychological wellbeing, reduce the mental health burden as well as to improve the mental health outcomes of migrant and ethnic minority groups (Foo et al., 2018). While it is clear that migrants and ethnic minorities are exposed to various risk factors, this exposure does not necessarily lead to the development of mental health problems. Resilience factors, such as social support, positive coping strategies, and personal characteristics can help individuals navigate adversity and prevent mental health problems to develop (Dubus, 2022). Resilience can also be fostered through utilising available resources to address mental health concerns. Therefore, interventions that focus on increasing resilience, such as by strengthening social networks, may help to prevent mental health problems among migrants and ethnic minorities.

In the current literature, no review could be found on mental health interventions for the broader group of migrants and ethnic minority populations in Europe. The existing review studies on refugees and

asylum seekers are particularly relevant to shed light on these groups' specific needs, recognising the fact that forced migration may constitutes the highest mental health risk (Uphoff et al., 2020). However, we also need a better understanding of what renders mental health interventions effective for the larger group of migrants and ethnic minorities. This includes a broad range of people such as first-generation migrants (which may or may not include previous refugee experiences), second-generation migrants and ethnic minorities. Recognising the fact that no universally accepted definition of migrants exists (IOM, 2023), the current scoping review uses the International Organisation for Migration definition of migrants (IOM, 2009) "as anyone who moves away from their usual place of residence regardless of legal status, the reason for migration and the length of stay". This review aimed to fill the above-mentioned knowledge gaps for this broader groups of migrants and ethnic minorities as population of interest by mapping and synthesising the available evidence on effective approaches and interventions to improve their mental health and well-being.

4.4.3 Methods

A scoping review methodology was fit for the purpose given the broad field of inquiry and the likely mix of outcomes and research designs adopted. We applied Arksey and O'Malley's multistage methodological framework (Arksey and O'Malley, 2005), taking into account Levac et al.'s (2010) refinements. The stages are: (1) Clarifying and linking the purpose and research question, (2) Identifying relevant studies and balancing feasibility with the comprehensiveness of the scoping process, (3) Applying an iterative team approach in the study selection, (4) Charting the data, (5) collating and summarising the results through a qualitative thematic analysis and reporting implications of the findings for policy, practice and research. The systematic data selection was based on the PRISMA extension guidelines for scoping reviews (Tricco et al., 2018).

Stage 1: Clarifying and linking the purpose of the review to the research question

Definitions

The term "Migrants and ethnic minorities" describes heterogeneous groups with numerous definitions. For this study, we used the definitions of the International Organization for Migration (IOM) (2019). In this framework, "migrant" is defined as "*an umbrella term, not defined under international law, reflecting the common lay understanding of a person who moves away from his or her place of usual residence, whether within a country or across an international border, temporarily or permanently, and for a variety of reasons.*" "Ethnic minority groups", are in this scoping review broadly defined as a group within a community that has a specific way of life, based on meanings, crucial for processes of identification and differentiation (Jenkins, 2008), which differs from the rest of the population. In many

cases, but not always, ethnicity is intertwined with migration, increasing their significance and salience, which makes it also interesting to discuss together in this review (Erel et al., 2016).

To inform the further scoping process, we delineated the scope of the search, operationalized the search terms and defined a clear research question (Levac et al., 2010). During a first team meeting, we discussed and decided on the research question based on a PICo approach (Population, Interest and Context) (Stern et al., 2014; Eriksen and Frandsen, 2018), see table 1. The protocol has been registered at the Center for Open Science (https://doi.org/10.17605/OSF.IO/R8SBF).

Table 1. - Delineating the review question and refining the search strategy based on PICo-approach

PICo Search Strategy	Inclusion criteria	Exclusion criteria
Population	Migrants (as defined by IOM) and Ethnic Minority groups. This includes e.g. second-generation migrants, economic migrants, people migrating because of family reunification, undocumented migrants, etc. (While these definitions include the refugees and asylum seekers, we excluded them if interventions were solely targeted at refugees and asylum seekers, see exclusion criteria)	Studies solely focused on refugees and asylum seekers. *Rationale*: asylum seekers and refugees have different mental health needs. When ethnicity/migrant background is included as a control variable and not the focus of the study, we do not include them in the review.
	Adults aged +18 years old.	Children or adolescents aged -18 years old. *Rationale*: children and adolescents may experience different mental health needs and specified intervention approaches.
Interest	Studies describing interventions oriented at improving mental health/well-being outcomes; other interventions can be included if they provide a clear link to mental health outcomes.	Studies describing interventions without (a link to) outcome measures for mental health or well-being. Studies describing purely medical/pharmacological interventions are excluded. Articles relating to broad policies are excluded from the results, but we included them where relevant in the discussion to stimulate debate.
Context	All countries of EU/EEA + UK and Switzerland; if more countries are	Studies solely focused on countries outside EU/EEA + UK.

	involved in the study (e.g., high income countries), we include the paper but only focus on the European part.	*Rationale:* we only include studies related to the geographical region of Europe to limit the variability in study contexts.

The conceptualization of these terms led to a clearly articulated scope of inquiry and enabled us to develop the following research question for the review:

> "What is known about interventions applied in the EU/EEA +UK to improve migrants' and ethnic minorities' mental health or well-being?"

Building further on this general review question, we defined the following specific objectives: 1) To identify what interventions are available and their respective outcomes; 2) To provide an overview of the intervention mechanisms and culturally adapted delivery strategies applied within the selected studies, focusing on the specific target groups; and 3) To identify barriers and facilitators for intervention uptake. Finally, the goal of this scoping review is to give recommendations for policy and practice based on the critical appraisal of the available evidence.

Stage 2 – Identifying relevant studies

We added eligibility criteria for the search strategy to the PICo-criteria, such as year of publication, availability of text and language of publication. We searched for peer-review journal articles available in full-text and written in English until the date of the search, i.e., 01/07/2022. We included all study designs. We excluded comments, letters to the editor, books and book chapters, conference abstracts and theses. We defined the search terms and potential databases, based upon available resources by the review team (i.e., consisting of the first three authors). The first author conducted a few try-out literature searches using different databases to check for the most suited search terms and date range. Interim results were continuously discussed by the team to develop the final, comprehensive search string. We searched three main relevant bibliographic databases from their inception, i.e., PubMed, Web of Science and PsycInfo. Key search terms were a combination of the core concepts of our research objectives and related terms or synonyms. The core concepts were "intervention", "improving", "mental health", "migrants and ethnic minorities" and "countries from EU/EEA +UK". The search string can be found in appendix 4.

Stage 3 – Study selection

All results of the final literature searches were deduplicated using EndNote and were listed by the first author in a Microsoft Excel file. The first three authors screened the results (title and abstract) independently. During several team meetings, they discussed all results and selected relevant studies

for full-text reading according to the eligibility criteria (as listed in table 1). Reasons for exclusion after full-text reading were reported and categorised. If full-text reading revealed reference to other relevant articles, not included in the search results, an additional manual search was performed to include and assess those studies. Furthermore, we have scoped the individual studies within the meta-analyses. Most studies were also retrieved by our own search strategy. However, studies that met our inclusion criteria, were additionally included (e.g., Jacob et al., 2002; Chaudry et al., 2009). Furthermore, we included the meta-analyses as well, as we deemed their analyses and comprehensive conclusions relevant for answering our review questions and the discussion of the results. The flowchart in Figure 1 illustrates the details of the search and selection process.

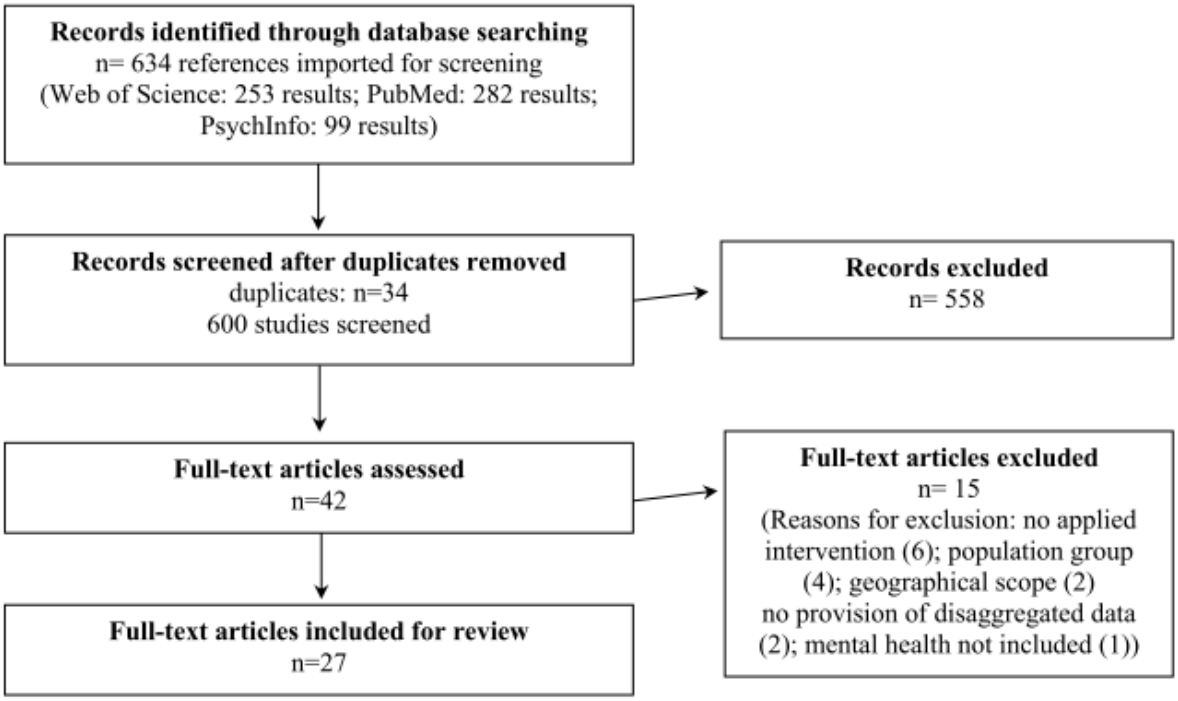

Figure 1: Flowchart of search and selection process

Stage 4 – Charting of the data

The first author drafted a data extraction sheet using Microsoft Excel, which was piloted by the team with several articles. The data extraction sheet compiled the following key characteristics of the full-text articles: author, year of publication, title, country of study, participant characteristics, sample size (if applicable), methodological approach and study design, context of study, phenomenon of interest, theory of change (if applicable), intervention description, used instruments to measure outcomes, results and outcomes, barriers, facilitators, recommendations, study limitations, and data screeners' remarks. Reasons for exclusion after full-text reading were recorded. All selected articles were randomly assigned to one of the three first authors to extract data, and cross-checked and discussed with the

other team members. The categories used in the data extraction sheet form the basis for the next steps, i.e., the synthesis of the results.

Stage 5 – Collating and summarising the results

We performed a thematic narrative synthesis of the selected articles to analyse the relevant thematic, methodological, and population-specific characteristics. We first inductively coded the intervention relating to their content (see the descriptive part under results). We then mapped the identified interventions along a continuum of disease prevention (i.e., primary prevention and promotion of well-being to prevent problems before they emerge) to secondary prevention (i.e. targeted interventions for people at high risk of developing mental disorders when exposed to specific risk factors) to tertiary prevention (i.e. focusing on interventions for people with acute or chronic mental health problems). The latter is distinct from pharmacological treatment (see eligibility criteria) but focusing on strategies to support patients in coping and living well with ill mental health including self-management. While we acknowledge that these stages may overlap and fluctuate in real life (Purgato et al., 2021), we use them for theoretical conceptualisation and because many health professionals are familiar with it. Clearly, this categorisation remains descriptive, and does not address underlying health disparities relevant for migrant mental health based on e.g., ethnic inequities or socio-economic status, as indicated by Compton and Shim (2020). Instead, Compton and Shim (2020) propose to look at how to reduce the population burden of social mental health determinants, which are highly interconnected. A true classification system for mental health interventions based on social determinants of health does not exist. We therefore aimed to contribute to this theoretical gap by analysing the intervention mechanisms in terms of addressing the different levels of social health determinants.

To provide accurate answers to the research objectives, we also analysed the intervention approaches used in-depth. For instance, we analysed the category 'intervention description' with a specific focus on the interventions' cultural adaptation. Similarly, interventions describing a participatory approach, were labelled under different categories along the continuum proposed by Attygalle (2020): from community-informed (CI) over community-shaped (CS) interventions to community-driven (CD) initiatives. Interventions aiming to increase access to services at the respective stages of the prevention continuum were also included.

All authors commented on all results, conclusions drawn, and policy recommendations made and achieved consensus through discussion.

4.4.4 Results

Description of selected studies

We retrieved 282 results in PubMed starting from 1989, 253 results in Web of Science from 1993 and 99 results in PsycInfo from 2012. After the removal of duplicates and the screening process, we included 27 articles in the final selection, covering a period between 2002 and 2022. An overview of the studies can be found in Table 2. The number of articles and the number of interventions differ, as two articles, i.e. Osman (2017) and Osman (2021) focus on the same intervention/program. We have included both articles as they describe relevant information on the intervention's mechanisms and results. The majority of the literature was published after 2010 (n = 20), with the number of articles peaking in 2015 (n = 3), 2017 (n = 4), and 2021 (n = 4). The selected articles comprised quantitative (n = 9), mixed methods (MM; n = 9), qualitative studies (n = 6), and review studies (n = 3; one scoping review and two meta-analyses), as shown by Figure 2 below. Among the quantitative studies, the majority were intervention studies describing randomised controlled trials (RCT) (n=8), and one observational pre-and post-test design of a pilot study. The MM studies included n=2 (exploratory) randomised trials with an embedded qualitative component using interviews and focus groups to assess participants' experiences with the respective interventions. Two MM studies adopted a longitudinal cohort design combining quantitative with qualitative data. The qualitative studies adopted different study designs (i.e., a case study, interview studies (n=3) and qualitative evaluations of pilot studies (n = 2)). The majority of the studies described interventions in a single country, i.e., the UK (n = 13), the Netherlands (n = 5), Sweden (n = 3) and Ireland (n=1). Four studies focused on multiple countries or had a global scope including Europe.

Figure 2: Countries, methods used and intervention content of the included studies

In terms of intervention content, we first categorized the interventions inductively based on their main intervention content, independent of setting or delivery modes. This resulted in the following distribution: 5 articles reported on parenting programs (including pre,- peri- and postnatal programs), 9 articles on social change intervention in the wider sense, 3 on lifestyle intervention (physical activity), 2 on arts-based interventions, 3 on self-help interventions (of which two were e-health interventions), and 2 on health education interventions. Looking at when in the course of prevention these interventions were delivered, we classified 8 as primary prevention, 8 as secondary and 9 as tertiary prevention (see Table 3).

Table 2. Overview of intervention studies - Alphabetical order

Authors+ publication year	Country	Study design	Population + sample size	Intervention	Mechanisms of change	Results	Limitations
Afuwape et al., 2010	United Kingdom	RCT	N = 40 members of BME communities from London Borough of Southwark	A needs-led and community-based package of mental health care, which included brief psychological interventions, advocacy and health education.	Advocacy and health education improve depression and reduce anxiety.	Participants in the intervention group were significantly less severely depressed compared to control group participants at 3 months (GHQ-28 sub-scale severe depression); the rapid access group had significantly better outcomes than the standard access group for two of the SF-36 scales: mental health p=0.04 and vitality p=0.01; significantly better outcomes for the rapid access group for the Mental Health Component score p=0.02.	Small number of participants; imbalance at baseline between groups; potential interviewer bias.
Arundell et al., 2021	Global review	Systematic review and development of conceptual typology	N = 88 studies on BME adults experiencing symptoms or diagnosed with mental health conditions or receiving psychological treatment	Review and assessment of the effectiveness of culturally adapted psychological interventions for people from ethnic minority groups + development of a conceptual typology.	Not applicable.	Adapted interventions had significant better outcomes compared to control conditions (waitlist/no intervention); adapted interventions also had significant better outcomes compared to other active treatments. Benefits were also seen in self-help interventions. Interventions including organization-specific adaptations were found to be more efficacious than interventions that did not incorporate these types of adaptations.	Risk for ecological bias: overlooking important distinctions between cultures, experiences and beliefs.
Baskin et al, 2021	United Kingdom	Scoping Review	N = 7 studies focusing on	Review of community-centered interventions	Not applicable.	Interventions aimed to address social isolation through building	Omission of grey literature;

Authors+ publication year	Country	Study design	Population + sample size	Intervention	Mechanisms of change	Results	Limitations
			ethnic minority populations (adults 18-64 years, no severe mental issues) Excluding studies solely focusing on new migrants and refugees	focused on improving Public mental health interventions for ethnic minority groups in the UK, excluding clinic interventions.		peer-to-peer support and social networks, and to overcome structural barriers in accessing care; interventions were delivered by lay health workers, and facilitated linkages to complementary services. Qualitative data commonly found a reduction in social isolation and stress, and improved mood and self-confidence.	homogeneous recommendations cannot be made to a culturally and ethnically heterogeneous population.
Chaudhry et al., 2009	United Kingdom	Observational pilot study: pre/post intervention	N = 9 British Pakistani women diagnosed with depression	Social group intervention with weekly group sessions of psychoeducation, personal grooming, exercise and yoga (10 sessions in total).	Informal social support, mental and physical health education to reduce depression; facilitation of the development of informal networks to enhance social contact and link the participants with appropriate mental health services.	Reduction in depression scores (SRQ) pre-intervention to post-intervention: 15 (SD=3.08) to 11.7 (SD=5.95), p=0.039; Interviews post-intervention diagnosed 2 participants as no longer depressed (SCAN). Anecdotal feedback from the participants: relationships developed between participants and facilitators and the provision of transport were the most important components of the intervention.	Not mentioned.
Christodoulou et al., 2018	United Kingdom	Discovery interview method and thematic analyses	N = 6 Turkish speaking self-service users of guided self-help	Guided self-help (GSH) to psychological therapies.	Not explicitly mentioned	Results indicate the need for better definitions of guided self-help and the role of psychological well-being practitioners herein; language biases of the intervention; the importance of the relationship between mental health complaints	Sampling bias: small sample and withdrawal; some participants waited for a re-referral or

Authors+ publication year	Country	Study design	Population + sample size	Intervention	Mechanisms of change	Results	Limitations
						and physical complaints; stigma associated with mental health.	another psychological intervention.
de Freitas et al., 2015	The Netherlands	Case study: observation, documentary evidence and interviews	N = 20 Cape Verdeans affected by psychosocial problems; N = 30 institutional stakeholders	Minority user participation in a community-based mental health advocacy project 'Project Apoio', created by a user organization in Rotterdam to promote Cape Verdean migrants' rights and access to mental healthcare.	Inclusion of migrants and ethnic minorities in spaces to give citizens a voice in healthcare governance; Participation Chain Model (PCM)	Getting into participatory spaces did not immediately equate with voicing needs and demands. Participants required assistance in building the confidence necessary to take action, within an environment where they felt encouraged to speak their minds. Individual and collective motivations, mobilization, and empowering dynamics all play a role in facilitating the involvement of users who are marginalized or stigmatized.	No cross-case comparison of participatory spaces engaging different marginalized groups, or healthcare settings.
Degnan et al, 2018	Existing Western interventions (i.e. influenced by European culture, including Europe, USA, Canada and Australia)	Systematic review and meta-analysis	46 papers comprising 43 individual studies with 7828 participants were included; 31 simple RCTs, 12 cluster RCTs, one block RCT and two non-randomised pilot trials	Review and assessment of the nature and efficacy of culturally-adapted psychosocial interventions for schizophrenia - focus on cultural adaptations in schizophrenia.	Not applicable	Significant post-treatment effects in favor of adapted interventions for total symptom severity (n = 2345, g: −0.23, 95% confidence interval (CI) −0.36 to −0.09), positive (n = 1152, g: −0.56, 95% CI −0.86 to −0.26), negative (n = 855, g: −0.39, 95% CI−0.63 to −0.15), and general (n = 525, g: −0.75, CI −1.21 to −0.29) symptoms. Nine themes emerged from the data on adaptations: 1) language; 2) concepts and illness models; 3) family; 4) cultural norms and practices; 5) communication; 6) context and delivery 7) content; 8)	Large variation across studies in the quality of reporting of methodology. All papers reported some level of adaptation, but often poorly documented.

Authors+ publication year	Country	Study design	Population + sample size	Intervention	Mechanisms of change	Results	Limitations
						therapeutic alliance. All studies reported adaptations to language.	
Dubus et al., 2022	Germany, Greece, Iceland, Mexico, Switzerland, and the United States	Qualitative Study: thematic content analysis	N = 73 social workers; N = 34 forced migrants (N = 21 refugees, N = 7 asylum seekers, N = 6 undocumented migrants)	CBT and resilience-enhancing interventions.	CBT is expected to be an effective treatment approach for depression and anxiety. Adding resilience interventions could be culturally effective, as they consider the contexts and crises encountered by forced migrants encounter. This should lead to better coping skills and use of the resources they have.	Results indicate that most social work interventions consisted of short-term case management centered on initial housing and healthcare. Recipients of CBT appreciated the pragmatic approach of case management and corresponded to concrete needs, but recipients suffering from PTSD and those who did not plan to resettle in the specific host country found it less helpful. Resilience-enhancing interventions were experienced to increase sense of self-control, optimism for the future, and reduce anxious symptoms.	Study was unable to determine which practices enhance resilience, thus more research is needed.
Edge et al., 2018	United Kingdom	A mixed-methods, feasibility cohort study, incorporating focus groups and an expert consensus conference	N = 31 African-Caribbean people diagnosed with schizophrenia and their families or family support members (FSM)	Culturally adapted Family Intervention (CaFI): an extant Family Intervention (FI) model was culturally adapted with key stakeholders using a literature-derived framework. Ten CaFI sessions were offered to each service user and associated family.	Systematically developed, but no overall theory of change for the intervention mentioned.	The rating of sessions and the qualitative findings indicated that CaFI was acceptable to service users, families, FSMs and healthcare professionals. Proven feasibility of collecting a range of outcomes to inform future trials. Confirmation of CaFI's acceptability by key stakeholders.	Lack of a control group and limited sample size; insufficient power to assess efficacy. Non-generalizability of findings beyond target population.

Authors+ publication year	Country	Study design	Population + sample size	Intervention	Mechanisms of change	Results	Limitations
Eylem et al., 2021	United Kingdom, The Netherlands	RCT with qualitative component	N = 18 Turkish migrants with mild to moderate suicidal ideation	Culturally adapted e-mental health intervention, based on an evidence-based e-mental health intervention for the general population.	CBT plus mindfulness improves the control of thinking and regulates feelings.	Suicidal ideation, depression, and hopelessness scores were improved in both intervention and control group. Participants reported better self-management. While they emphasized the therapeutic benefits, the e-intervention's feasibility was perceived to be low. Main reasons: not having severe suicidal thoughts and not feeling represented by the culturally adapted intervention.	Effects of receiving usual care were not monitored. Stigma on mental health was not assessed.
Gater et al., 2010	United Kingdom	RCT and qualitative study	N = 123 British Pakistani women with diagnosed depression (cluster-randomized in 3 arms)	Intervention group 1: social group intervention; intervention group 2: social group intervention combined with antidepressants; Control group: people taking antidepressants prescribed by GP.	The creation of social networks to increase social contacts and activities in a culturally acceptable manner; combined with psychoeducation to increase information on depression.	No significant effect on reduction of depression (HRSD score). Differences in social functioning were significant at 3 months FU only (greater in social intervention group and combined group than treatment group only). No statistical significant differences between the groups on the remission of depression (only after 3 months FU but not later on).	Loss of power of statistical models due to RCT; small sample size.
Hesselink et al., 2012	The Netherlands	Non-randomized trial	N = 239 ethnic Turkish women (N = 119 in HMHB intervention; N = 120 in control group)	'Happy Mothers, Happy Babies' (HMHB) program: Perinatal education program on smoking, infant care, and psychosocial health; consisting of 8 group classes of 2 hours,	Not explicitly mentioned	Participation in HMHB program increased knowledge about smoking, intention to engage in SIDS prevention, and short-term SIDS prevention behavior. The program had a positive effect on mild depressive symptoms, and among those who had at least six contacts with the program. No intervention effect for smoking	No comparable test and control group due to recruitment issues.

Authors+ publication year	Country	Study design	Population + sample size	Intervention	Mechanisms of change	Results	Limitations
				2 individual contacts of 2 hours each (before delivery), and 2 home visits of one hour each (after delivery).		during pregnancy, smothering, slapping, and shaking of babies, long-term SIDS prevention behavior, serious depressive symptoms, and parent–child attachment.	
Jacob, Bhugra & Mann, 2002	United Kingdom	RCT	N = 70; Asian women with depression in primary care settings (GHQ core > 3)	Intervention group: psycho-education in primary care compared with treatment as usual (TAU) (not blinded).	Non-medical explanatory models of illness may result in lower rates of detection of common mental disorders. Psychoeducation on depression may positively affect perspectives and outcomes of depression.	Women in the intervention group who received the educational material had a higher recovery rate than the control group (defined as GHQ-12 score ≤2): OR 3.4 (95% CI: 1.01 to 11.5) at 2 months FU. No difference in explanatory models were observed.	Conducted within the limits of a busy primary care practice; mechanisms of change unclear.
Khan et al., 2019	United Kingdom	Qualitative interviews and evaluation design	N = 15 British Pakistani mothers that scored high on the EPDS depression scale (>11)	CBT-based intervention ('the Positive Health Program' (PHP)) for depression.	Based on CBT elements ('here and now') and problem solving approach; culturally based therapies for depression.	The intervention was acceptable to this group and improvements in depression and health-related quality of life were noted. 'Depression' was understood in physical terms, triggered by psychosocial causes, such as marital disharmony, lack of social support, and financial difficulties. Antidepressants were offered in the past and not welcomed. The need for culturally sensitive interventions and limited cultural sensitivity of NHS staff was stressed.	Small study sample; non-controlled pre-post feasibility study design; measurements of assessment tools; no data collection on antidepressants/nature of depression.
Knifton et al., 2010	Scotland	Evaluation design:	N=257; members of	Intervention group: 26 mental health	Active involvement of members of BME	'Community conversation' workshops effectively engaged	Sample biases: in terms of

Authors+ publication year	Country	Study design	Population + sample size	Intervention	Mechanisms of change	Results	Limitations
		Mixed methods (focus group discussions and attitude scales)	the major black and minority ethnic (BME) communities, that migrated from India, Pakistan and China	awareness workshops organized by community members.	communities in the organization and awareness raising of mental health decreases mental health stigma.	participants and resulted in reductions in reported stigma.	gender, generation, participation/ marginalizatio n in communities; no population-wide awareness campaign
Kocken et al., 2008	The Netherlands	RCT + (provider-administered interviews in patients' own language)	N=104 female patients with psychosomatic disorders from Turkish and Moroccan origin	Intervention group: 8 group sessions by trained migrant health educators, and individual tailored counseling including a conclusion and evaluation session. Control group: TAU	Based on stress reduction theory migrant health educators were used to improve communication with GPs, change beliefs (explanatory models), self-efficacy to cope with stressors and coping with psychosomatic complaints.	Significant improvement of perceived general and psychological health and reported ability to cope with pain were observed in the intervention group. No effects for social support and the perceived burden of stressful life-events.	Study design does not allow to determine which intervention elements caused the effects. Short follow up period.
Lovell et al., 2014	United Kingdom	Exploratory randomized trial with mixed-methods analysis	N = 57 participants; n = 20 belonging to ethnic minorities	An acceptable and culturally sensitive psychosocial intervention for older people and people from ethnic minority communities. Participants were offered an initial patient-centered	Culturally adapted CBT elements; patients as agents of change	Effects among ethnic minorities were generally smaller than in the elderlies. The largest effects were on depression (PHQ9), health-related quality of life (EQ5D) and functioning (WSAS). Qualitative analysis results: importance of face-to-face contact and flexibility to consult people at home; group intervention and	Scales not culturally validated; low recruitment rates due to constraints in resources/limit ed time

Authors+ publication year	Country	Study design	Population + sample size	Intervention	Mechanisms of change	Results	Limitations
				assessment session with a wellbeing facilitator, and collaboratively devised a well-being plan.		content of intervention positively evaluated, need for longer term support.	
Lwembe et al., 2021	United Kingdom	Pilot study evaluation (focus group discussions and semi-structured interviews)	N=25 (Interviews with patients of BME, community group representatives, providers (N=19); and one focus group with N=6 patients	Participation in co-production of a novel community mental health service for black and ethnic minority service users.	Developing personal goals and participation in decisions to increase sense of control to enable patients to access services and complete treatment.	Co-production of all stakeholders involved better responds to the needs of BME and reduces mental health inequalities and service use. Co-production can be integral to mental health service delivery.	Small scale study with limited intervention period.
Malone et al., 2017	Ireland	A combined and integrated science-arts study design	N = 150 members of the Irish Travelers community	Combination of a psycho-biographical autopsy with a visual arts autopsy, in which families donated stories, images and objects associated with the lived life of a loved one lost to suicide. Through an interdisciplinary research platform, a mediated exhibition was created (Lived Lives) around suicide prevention.	Not explicitly mentioned	The intervention demonstrated that hard-to-reach audiences can be reached and engaged on sensitive health issues such as suicide. The Lived Lives methodology encouraged inclusivity from the start and the Irish Travellers involved took co-ownership of the project and moved towards taking active steps to address the problem of suicide in their community.	Practical drawbacks to the location and timing of the art event.

Authors+ publication year	Country	Study design	Population + sample size	Intervention	Mechanisms of change	Results	Limitations
Mantovani et al., 2017	United Kingdom	Qualitative study using a participatory approach	N=13 African and African-Caribbean lay people	Pilot outreach intervention: Community engagement model to address mental health needs. Lay people trained as well-being champions to raise awareness about mental health in the community; Methods used to achieve buy-in in faith-based organizations: workshops, awareness raising, meetings.	Logic model of change is mentioned, but not explained in detail: non-linear, reciprocal relationship between community engagement processes and the social determinants of mental health.	Community champions used group work and informal one-to-one conversations as main strategies. Circles of influence were used to share ideas about mental health and well-being. Community champions encountered resistance at community level: lack of knowledge on mental health, taboos and ascribed stigma. Community champions felt inadequately equipped to address sensitive issues. They were instrumental in bringing people together, formed a network structure and some acted as a bridge to public health services.	No longitudinal evaluation of the intervention and lack of insight in transformative changes within community engagement.
Osman et al., 2017	Sweden	RCT	N=120 Somali-born parents with children school-aged children (11-16 yrs) with self-perceived parenting stress (N=60 in intervention group; and N=60 in waiting list control group)	An intervention with two main components: societal information and the existing CONNECT parenting program, delivered using a culturally sensitive approach (12 group-based sessions). The intervention was culturally adapted (eg. Somali facilitators of both sexes) and gender-mixed groups. Child care services were offered during sessions.	Attachment theory, parents are encouraged to focus on strengthening the parent-child relationship.	Significant mental health improvements in the intervention group compared with control parents at2-month follow-up: B=3.62, 95% CI 2.01 to 5.18, p<0.001. Significant improvement was found for efficacy (B=−6.72, 95%CI −8.15 to −5.28, p<0.001) and satisfaction (B=−4.48, 95%CI −6.27 to −2.69, p<0.001) compared to controls. Parents' satisfaction mediated the intervention effect on parental mental health (β=−0.88, 95%CI −1.84 to −0.16, p=0.047). No gender differences between mothers and fathers.	Short interval of follow-up (2 months)

Authors+ publication year	Country	Study design	Population + sample size	Intervention	Mechanisms of change	Results	Limitations
Osman et al., 2021	Sweden	Longitudinal cohort study design (Impact study of Osman, 2017)	N = 51 Somali-born parents (participants in study above: Osman et al., 2017)	(See above, Osman et al., 2017)	(See above, Osman et al., 2017)	Significant improvement over time for all outcome including parents' mental health (GHQ- 12: 95%CI 0.40 to 3.11, d=0.46), and their children were maintained 3 years after the intervention.	Lack of control group; outcome measures not previously tested for reliability and validity on specific population; use of parental reports only may introduce a bias.
Rabiee et al., 2015	United Kingdom	Cross-sectional mixed methods design	N = 257 members from ethnic minority groups in a deprived constituency in Birmingham	Gym-for-free pilot project providing adults free access to leisure centers.	Regular exercise helps to improve mood, self-esteem, confidence and quality of life.	Increased energy levels, confidence, mental well-being, reduction in stress and anxiety, improved stress relief and anger management were reported. The pilot scheme increased the uptake of exercise particularly for women in an economically deprived inner city area, especially those from Pakistani and Bangladeshi ethnic backgrounds. The use of leisure facilities also increased markedly ($p < .05$).	Long-term evaluation is required; recruitment was opportunistic, not random and not generalizable.
Reijneveld et al., 2003	The Netherlands	RCT	N=92; Turkish first generation elderly immigrants (aged 45+)	Intervention group: culturally adapted evidence-based program compared with a non-adapted physical exercise program.	Not explicitly mentioned	Improvement in mental health (effect size: 0.38 SD (95% confidence intervals 0.03 to 0.73), p=0.03) in the intervention group; in the oldest subgroup also in	Measurements for physical activity were modified, which may explain the

Authors+ publication year	Country	Study design	Population + sample size	Intervention	Mechanisms of change	Results	Limitations
						mental wellbeing (effect size 0.75 SD (0.22 to 1.28), p=0.01). Effects were largest for participants aged above 55.	negative outcomes (no improvements observed).
Siddiqui et al., 2019	Sweden	RCT	N = 96 Iraqi immigrants with a high risk for diabetes and depression (Intervention N = 50; control group, N = 46).	Seven group sessions addressing self-empowerment with emphasis on social interaction, social support and motivation, conducted over a period of 4 months with intervals of 1–4 weeks. The control group received written information.	Increased release of neurotransmitters through physical activity to improve mental health, and psychological mechanisms: social interaction and social support to improve self-esteem and self-efficacy.	Intervention group significantly scored lower on MADRS-S and HADS depression scale at visit 3 (MADRS-S OR 5.9, 95% CI: 1.6–22.5; HADS OR 4.4, 95% CI: 0.9–20.3). The results persisted after adjustment for age, sex, body mass index, time since migration, sedentary lifestyle and language spoken at home.	Study not designed for severe depression and anxiety; short follow up duration (4 months, effects at 2 months were not significant).
Ünlü-Ince et al., 2013	The Netherlands	RCT	N = 96 Turkish adults with depressive symptoms (N=49 experimental group and N=47 control group).	Intervention group: a culturally sensitive guided self-help, problem-solving intervention through the internet for reducing depressive symptoms in Turkish migrants; control group: waiting list.	CBT and problem solving therapy; culturally adapted	No statistically significant effects on the reduction of depressive symptoms, but the effect size at the post-test was high (indicator of effectiveness if tested with sufficient sample size?)	Small sample size
van de Venter et al., 2015	United Kingdom	Pre-and-post intervention mixed-methods pilot study	N=44 (White (N=38) and BME (N=6) British participants with	Intervention: arts-on-referral (AoR) scheme.	Not explicitly mentioned: Art interventions were found to improve mental well-being in a cost-effective way.	Participation in AoR improved mean well-being and in Warwick Edinburgh Mental Well-being Scale (WEMWBS) scores per session, however, more slowly for those with low baseline	Small sample size (especially for qualitative research, N=6), lack of control group, election

Authors+ publication year	Country	Study design	Population + sample size	Intervention	Mechanisms of change	Results	Limitations
			mild/moderate mental health symptoms			scores. Nonetheless, the latter may find arts participation helpful in managing emotions and preventing deterioration of well-being.	bias and the lack of a power calculation.

Legend with abbreviations: AoR: Arts-on-Referral; BME: Black and Minority Ethnic, British ethnic minority population; CaFI: Culturally adapted Family Intervention; CBT: Cognitive Behavioral Therapy; CI: Confidence Interval; EPDS: Edinburgh Postnatal Depression Scale; EQ-5D: European Quality of Life - 5 Dimensions; FI: Family Intervention; FSM: Family Support Members; FU: Follow-Up; GHQ-28/12: General Health Questionnaire (28/12 items); GP: General Practitioner; GSH: Guided self-help; HADS: Hospital Anxiety and Depression Scale; HMHB: 'Happy Mothers, Happy Babies'-programme; HRSD: Hamilton Rating Scale for Depression; MADRS-S: Montgomery–Asberg Depression Rating Scale; NHS: National Health Service; OR: Odds Ratio; PHP: Positive Health Program; PCM: Participation Chain Model; PHQ-9: Patient Health Questionnaire; PTSD: Post-traumatic stress disorder; RCT: randomized controlled trial; SCAN: Schedule for Clinical Assessment in Neuropsychiatry; SD: Standard Deviation; SF-36: Short Form survey (36 items); SIDS : Sudden Infant Death Syndrome; SRQ: Self Reporting Questionnaire; TAU: Treatment As Usual; WEMWBS: Warwick Edinburgh Mental Well-being Scale; WSAS: Work and Social Adjustment Scale

Population groups

The selected studies addressed a wide variety of population groups and differed in the terminology used to characterize the study population. Studies mainly from the UK addressed Black and Ethnic Minority (BME) populations (Knifton et al., 2010; Lovell et al., 2014; Rabiee et al., 2015; Van de Venter and Buller, 2015; Lwembe et al., 2017). Others addressed people of African and Caribbean origin (Afuwape et al., 2010; de Freitas and Martin, 2015; Mantovani et al., 2017; Edge et al., 2018). Several studies focused on target groups by nationality, such as Turkish (Reijneveld et al., 2003; Kocken et al., 2008; Christodoulou et al., 2018; Eylem et al., 2021), Moroccan (Kocken et al., 2008), Pakistani (Chaudhry et al., 2009; Gater et al., 2010; Khan et al., 2019), Indian (Jacob et al., 2002), Somali (Osman et al., 2017, 2021), and Iraqi migrants (Siddiqui et al., 2019). One qualitative study focused on forced migrants of different origins in a global perspective, including Germany, Greece and Switzerland (Dubus, 2022). We excluded studies solely focusing on asylum seekers and refugees, however, this study included participants with undocumented residence status next to refugees and asylum-seekers. Three studies included both ethnic minority populations as well as service providers and institutional stakeholders to assess and triangulate their different perspectives as research participants (de Freitas and Martin, 2015; Lwembe et al., 2017; Dubus, 2022). Two intervention studies were inclusive interventions, targeting socially disadvantaged and underserved populations including ethnic minority populations, yet providing disaggregated results (Lovell et al., 2014; Van De Venter and Buller, 2015). Finally, 6 intervention studies were developed and tested exclusively for ethnic minority women (Jacob et al., 2002; Kocken et al., 2008; Chaudhry et al., 2009; Gater et al., 2010; Hesselink et al., 2012; Khan et al., 2019). The three review studies applied a broad definition of target populations, and included a combination of different ethnic minority populations. One study (Baskin et al., 2021) focuses on UK minority populations, using ethnicity descriptors as defined by the UK 2011 Census from the Office of National Statistics (Office for National Statistics 2011). Applying the same descriptors in combination with those from the United States Census Bureau (United States Census Bureau, 2020), Arundell et al. (2021) enlarged their focus to “black, ethnic minority, migrant, refugee or asylum seeker communities, and people referred to as ‘minorities’ or defined as belonging to an identified racial or ethnic ‘minority group’” in their global review. Degnan and colleagues (2018) used the broad definition of ethnic group or subculture, being ‘a minority culture within a larger dominant culture’.

Types of interventions

Using a public health lens, we describe the identified studies on a prevention continuum, as presented above (see Table 3). Two studies were labelled within multiple categories, e.g., an intervention

combining evidence-based treatment approaches with mental health promotion at the community level (Eylem et al., 2021; Dubus, 2022).

Primary prevention and promotion of well-being

We classified eight studies as primary prevention interventions. Given the economic advantages as well as the legal and human right obligations to keep migrants and ethnic minority populations healthy (Agyemang 2019), interventions that support them in maintaining good mental health are relevant. The identified interventions were quite diverse in terms of their approaches used, intervention strategies, and target populations. Studies were either based on thorough cultural adaptation of already existing evidence-based interventions, such as a Dutch study reporting on the successful cultural adaptation of a physical exercise program for elderly Turkish migrants in the Netherlands (Reijneveld et al., 2003). The intervention resulted in significant mental health improvements, but not in physical well-being and exercise activity (see Table 2). An exploratory primary care trial tested a well-being intervention in general practitioners (GP)-settings in the UK (Lovell et al., 2014) including both underserved older Europeans and people of Somali- or South Asian origin. This intervention combined individual- and group elements with adequate referral and resulted in improved well-being and social functioning in both groups. However, community engagement turned out to be a more relevant factor in the migrant group than in the comparison group. Three studies described community-led interventions emphasizing participatory approaches (Knifton et al., 2010; Malone et al., 2017; Mantovani et al., 2017). The latter used arts-based strategies to engage communities, while Mantovani et al. (2017) adopted a community engagement model to train and work with well-being champions. Earlier, Knifton et al. (2010) engaged community members to hold awareness-raising workshops effectively addressing mental health stigma and discrimination. A culturally sensitive perinatal program systematically developed for pregnant Turkish mothers ('Healthy mothers, healthy babies') engaged ethnic minority midwives to conduct group sessions and home visits (Hesselink et al., 2012). The intervention delivered in mother-child centres demonstrated a positive effect for mild depressive symptoms, but was underpowered to detect differences in other envisaged outcomes (i.e. severe depression, parenting behaviours, smoking cessation).

Secondary prevention

Eight articles qualified as targeting people and groups who are at heightened risk of developing mental health problems. The mental health and psychosocial problems addressed differed according to studies and targeted populations. Conditions and population groups addressed included post-traumatic stress disorder among forced migrants of diverse origins in a multi-country study using a resilience approach (Dubus, 2022), acculturation stress among Somali-born parents in Sweden (Osman et al., 2017, 2021),

concurrent diabetes and depression among Iraqi immigrants in Sweden (Siddiqui et al., 2019), suicidal ideation among Turkish migrants in the Netherlands (Eylem et al., 2021), and psychosomatic problems and pain among Turkish and Moroccan women in the Netherlands (Kocken et al., 2008).

One study looked at access to mental health services for people diagnosed with mental illness (Lwembe et al., 2017) using co-production techniques. A qualitative study explored how Cape Verdean migrants experiencing psychosocial problems (de Freitas and Martin, 2015) could be encouraged, valued, and sustained through participatory initiatives by creating community-based hybrid mental health spaces. A culturally adapted health education intervention delivered in primary care settings in the Netherlands used trained migrant educators providing culturally adapted information, counselling and support based on stress reduction theory for women of Turkish and Moroccan origin with psychosomatic problems (Kocken et al., 2008). The randomized controlled trial showed significant improvements in perceived general and psychological health, and self-reported ability to cope with pain in the intervention group compared to a control group receiving treatment as usual (TAU). No effects were found on social support and the perceived burden of stressful life events due to precarious life circumstances. The evaluation revealed participants' subjective perceptions of psychosomatic problems due to their different explanatory mental health models, as well as difficulties to change social support from the women's environment due to their often difficult socio-economic situation.

Tertiary prevention and self-management

We identified nine articles focusing primarily on tertiary prevention. Since the continuum is fluid, two studies (Eylem et al., 2021; Dubus, 2022) covered both secondary and tertiary prevention. Importantly, these studies showed how the use of migrant community health workers (e.g., Jacob et al., 2002; Afuwape et al., 2010; Gater et al., 2010) can help to target social determinants underlying mental health conditions. Studies were targeting families and social groups: two studies described family interventions: one study addressed women with postnatal maternal depression using cognitive-behavioural therapy (Khan et al., 2019), and Edge et al. (2018) reported on a systematically developed family-based intervention for schizophrenia. Two studies reported on social group interventions (Chaudhry et al., 2009; Gater et al., 2010), the latter in a primary care setting. Two interventions trained and employed community health workers (Afuwape et al., 2010), or trained migrant health educators (Jacob et al., 2002). Finally, we identified two culturally adapted self-management interventions using online technologies. The online intervention by Eylem and colleagues (2021) used culturally adapted elements of an already existing evidence-based e-intervention to reduce suicidal ideation coupling Cognitive Behavioural Therapy (CBT) with mindfulness practices. The intervention was evaluated using an RCT design with waiting-list control condition both in the UK and the Netherlands targeting Turkish

migrants at risk of suicide. It showed improved suicidal ideation, depression, and hopelessness scores in both groups, no suicide attempt was reported during the study period, and participants reported better self-management. Participants perceived the mindfulness practices as helpful but reported that the online intervention provided too little structure while not being diversified enough. This pointed to the heterogeneity of migrant communities, and the existence of specific micro-identities. Another UK-based study (Afuwape et al., 2010) tested the feasibility and effectiveness of a culturally acceptable package of mental health care to improve the health and psychosocial functioning among BME patients, mainly of sub-Saharan African descent with a previous history of diagnosed depression and/or anxiety. Trained community health workers (i.e., ethnically matched psychology graduates) delivered brief CBT interventions under supervision), as well as advocacy and mentoring creating rapid access. This small-scale randomised community trial comparing an intervention group with TAU (i.e., local mental health services) showed significantly improved levels of depression at the three months follow-up for the rapid access group. It was the only study including a cost-effectiveness component, demonstrating that a needs-led mental health package did not significantly increase costs of service use. This intervention also improved the interface between statutory agencies and African community organisations, which is relevant from a policy point of view.

Table 3 - Categorisation of studies

Authors + publication year	Method			Prevention			Participatory approach	Cultural adaptation of interventions
	Qualitative	Quantitative	Mixed Methods	Primary	Secondary	Tertiary		
Afuwape et al., 2010		X				X	CI	
Arundell et al., 2021 (review)		X				X	CI/CS/CD	X
Baskin et al., 2021 (review)	X			X	X	X	CS	
Chaudhry et al., 2009		X				X	CS	
Christodoulou et al., 2018	X			X			CI	
de Freitas et al., 2015	X				X		CD	
Degnan et al, 2018 (review)		X				X	CI/CS/CD	X
Dubus et al., 2022	X				X	X		
Edge et al., 2018			X			X	CD	X
Eylem et al., 2021			X		X	X		X
Gater et al., 2010			X			X	CI	
Hesselink et al., 2012		X		X				
Jacob, Bhugra & Mann, 2002		X				X		
Khan et al., 2019			X			X		X
Knifton et al., 2010			X	X			CD	
Kocken et al., 2008		X			X			
Lovell et al., 2014			X	X			CI	X
Lwembe et al., 2021	X				X		CI	
Malone et al., 2017	X			X			CD	
Mantovani et al., 2017	X			X			CD	X
Osman et al., 2017		X			X			X
Osman et al., 2021			X		X			
Rabiee et al., 2015			X	X				
Reijneveld et al., 2003		X		X				X
Siddiqui et al., 2019		X			X			X
Ünlü-Ince et al., 2013		X				X	CI	X
Van de Venter et al., 2015			X		X			

Abbreviations: CI=community-informed, CS=community-shaped, CD=community-driven

Intervention mechanisms: Possible pathways to effective intervention outcomes

Interventions' effectiveness

Three reviews looked at the effectiveness of interventions (Degnan et al., 2018; Arundell et al., 2021; Baskin et al., 2021). Two meta-analyses demonstrated significant improvements of culturally adapted interventions over time compared to non-adapted interventions: one systematic review including 46 studies with more than 7,800 participants looked at post-treatment effects of culturally adapted psychosocial interventions for patients living with schizophrenia. The review showed significant post-treatment improvements for total symptom severity over interventions that were not explicitly mentioned to be adapted for the specific cultural population groups (Degnan et al., 2018). A second systematic review (Arundell et al., 2021) synthesised 88 studies describing psychological interventions for people belonging to ethnic minority populations experiencing or being diagnosed with a wide range of mental health problems (depression, anxiety, post-traumatic stress syndrome, psychosis, eating disorders and other non-specified mental health problems) on a global scale. The meta-analysis found medium effect size in reducing symptom severity in favour of adapted interventions when compared to controls, across all target conditions and adaptation types including self-help interventions. A narrative scoping review (Baskin et al., 2021) looked at the effectiveness of interventions using a community-centred approach in the UK. The authors identified seven studies, including four studies reporting statistically significant positive effects on mental health outcomes. Social connectedness, access to safe and affordable housing, and power in local decision-making were reported as important determinants for intervention effectiveness.

Among the studies identified in our review, several studies also showed significant improvements in mental health: six of the seven intervention studies adopting an RCT design demonstrated a positive effect on mental health outcomes, mostly a reduction in depression rates (Jacob et al., 2002; Reijneveld et al., 2003; Kocken et al., 2008; Afuwape et al., 2010; Osman et al., 2017; Siddiqui et al., 2019). Also, a non-randomized trial study (Hesselink et al., 2012) showed positive effects on reduction of mild depressive symptoms.

This points to an increasing evidence-base of effective interventions, at least under the controlled circumstances of trial studies. Interestingly, the four lifestyle interventions focusing on regular physical activity to also improve mental health outcomes, were all able to demonstrate positive impact on mental health outcomes (Reijneveld et al., 2003; Osman et al., 2017, 2021; Siddiqui et al., 2019). Also, the pilot evaluation of a free access scheme to exercise facilities for BME communities in the UK showed a preliminary increase in energy levels and self-confidence as well as reduction in stress, depression and anxiety (Rabiee et al., 2015). These findings show that social and environmental circumstances are

integral to lifestyle choices, hence the importance of public health policy to facilitate the joining up of different organisations to increase access and offer tailored activities.

Different factors explained why some interventions did not produce significant improvements on mental health outcomes, either referring to flaws in the study design or in the difficulty to impact structural and social factors. Some studies reported improvements in both intervention and control groups (Ünlü Ince et al., 2013; Eylem et al., 2021), showing the difficulty of conducting an RCT in real-life circumstances as community and social influences cannot be excluded (Ünlü Ince et al., 2013). Studies did not assess the exposure to usual care, provide sufficient cultural adaptation or assess mental health stigma (Eylem et al., 2021), or had problems recruiting sufficient participants (Hesselink et al., 2012). While direct support from migrant health educators contributed to the improved effects on coping and mental health, social support from participants' direct personal environment as one of the determinants of mental health problems proved to be more difficult to be influenced (Kocken et al., 2008).

Theory-driven interventions and intervention mechanisms

We analysed the theory-driven processes underlying the interventions, and the hypothesised processes leading to the observed outcomes. Evidence shows that complex healthcare interventions are more likely to be effective, sustainable, and scalable if they are using a sound theory-base and describe and test the causal pathways through which an intervention may achieve its expected outcome (De Silva et al., 2014). Providing such information also makes the intervention replicable, increasing knowledge on both the interventions' mechanisms and practical implementation. Against this background, we took a rather broad approach and coded whether studies provided any information on their underlying theory-base for assumed causal changes achieved through the intervention. Evidence also shows that developing, implementing, and evaluating interventions in collaboration with stakeholders adds to their effectiveness (Bartholomew et al., 2016). Thus, we also coded stakeholder participation (i.e., any pragmatic framework or narrative description explaining how the intervention may affect change).

More than half (n = 16) of the selected articles on intervention studies explicitly described their underlying theory base and hypothesised intervention mechanisms. Parenting interventions for instance, were based on attachment theory to support distressed parents in their adaptation to parenting styles in the host country change (i.e., Sweden) (Osman et al., 2017). For lifestyle interventions working with physical exercise, a combination of neuro-biological, psychological and social mechanisms was mentioned: enhanced physical activity leads to increased release of neurotransmitters believed to improve mental health, and psychological mechanisms such as social interaction and social support to improve self-esteem and self-efficacy (Rabiee et al., 2015; Osman et al., 2017). This resulted in self-

empowerment, which indeed showed improved scores in depression outcomes among Iraqi immigrants from baseline to the three months follow-up (Siddiqui et al., 2019). Some studies also focused on the improvement of communication patterns between mental health care providers and patients due to culturally diverse explanatory models, mainly through cultural mediators, community health workers and well-being champions (Jacob et al., 2002; Kocken et al., 2008; Mantovani et al., 2017).

Several interventions aimed at improving mental health outcomes through the creation of social networks to increase social contacts and activities in a culturally acceptable manner, therefore reducing social isolation. Combining such elements with psychoeducation to increase correct information on depression resulted in significant reduction of depression in a social intervention delivered in primary care settings for British Pakistani women with depression at three and nine months follow-up (Gater et al., 2010). Chaudhry et al. (2009) mentioned a similar theory of change: providing mental and physical health education and facilitating the development of informal networks to increase engagement in social contacts would reduce depression; they also linked the participants to appropriate mental health services to increase access. This intervention showed a significant reduction in depression scores from pre-to post-test, and feedback from the nine British Pakistani women with diagnosed depressive disorders showed that they perceived their relationship with the group session facilitators and the provision of transport as the most important components of the intervention. Some studies did not explicitly describe their underlying change models, but mentioned that they were systematically developed, or that they had conducted their own need assessment (Hesselink et al., 2012; Edge et al., 2018) or a cyclic process of data collection and evaluation (Christodoulou et al., 2018). Specifically, Kocken et al. (2008) recommended using generic guiding frameworks for the systematic development of health promotion interventions, such as the intervention mapping protocol to effectively tailor interventions to migrants' needs.

The underlying theory-base specifying the respective determinants that interventions aim to address to achieve the envisaged behavioural outcomes is also relevant as it determines the choice of the respective intervention strategies (Bartholomew et al., 2016): n = 7 intervention studies explicitly mentioned using cognitive behavioural therapy (CBT) approaches (Afuwape et al., 2010; Ünlü Ince et al., 2013; Lovell et al., 2014; Khan et al., 2019; Eylem et al., 2021; Dubus, 2022) or strategies that used CBT elements, such as personalised goal setting. As there is a large body of evidence for the effectiveness of CBT in treating mental health conditions, some of these interventions were based on existing evidence-based interventions, which were culturally adapted (Ünlü Ince et al., 2013; Khan et al., 2019; Eylem et al., 2021), other studies developed new interventions using participatory approaches (Afuwape et al., 2010; Dubus, 2022). The second main strategy consisted of various peer-support and participatory strategies (n = 6) focusing on empowerment through the facilitation of social interaction

and social support (Gater et al., 2010; Knifton et al., 2010; de Freitas and Martin, 2015; Lwembe et al., 2017; Mantovani et al., 2017; Siddiqui et al., 2019).

Table 4 summarises and ranks the different interventions and their change mechanisms (if mentioned in the studies) according to the level of social determinants they addressed: from the micro-level addressing individual level-factors, such as health education to change lifestyles, to interventions on the meso-level, focusing on migrants' and ethnic minorities' social and community networks, to interventions on a macro-level focusing on health systems changes through e.g. community participation and shared decision-making. We have adapted these levels from the often-applied social determinant framework, coined by Dahlgren and Whitehead (1991). Some interventions addressed multiple levels of social determinants, e.g., Gater and colleagues (2010) created social networks and increased the participants' knowledge on depression. For conceptual clarity, we distinguish between these levels, yet clearly they interact with each other and ultimately influence mental health at the individual level (Glanz et al., 2008).

Table 4. - Interventions and their underlying intervention mechanisms ranked according to different levels of social determinants.

Interventions	*Underlying intervention mechanisms*
Individual lifestyle	
Stimulating physical exercise (Chaudry et al.,2009; Rabiee et al., 2015; Osman et al., 2017; Siddiqui et al., 2019)	Physical activity is suggested to enhance release of beneficial neurotransmitters, improves mood, self-esteem, and confidence
Stimulating art activities (Van de Venter and Buller, 2015; Malone et al., 2017)	Art interventions reach and engage hard-to-reach audiences, helps to regulate emotions, and improve well-being
Improving health(care) knowledge (Jacob et al., 2002; Chaudry et al., 2009; Afuwape et al., 2010; Gater et al., 2010; Hesselink et al., 2012)	Psychoeducation enhances health(care) knowledge
Social and community networks and engagement	
Creation of social networks (Chaudry et al., 2009; Gater et al., 2010; Siddiqui et al., 2019)	Increased social contacts reduce social isolation, improve self-esteem and self-efficacy
Improving parenting skills (Osman et al., 2017, 2021)	Adapting parenting skills (attachment theory) improves parent-child relation
Community engagement (Knifton et al., 2010; Malone et al., 2017; Mantovani et al., 2017)	Community engagement increases awareness, improves communication and linkage with healthcare, changes beliefs, improves self-efficacy in coping

Addressing mental health stigma in communities and society (Knifton et al., 2010)	Awareness raising and addressing diverse cultural understandings of mental health reduces stigma
Adjusting the health system to the needs of migrants and ethnic minorities	
Improving communication between healthcare providers and migrants and ethnic minorities (Jacob et al., 2002; Kocken et al., 2008; Mantovani et al., 2017)	Cultural mediators, community health workers, well-being champignons improve the communication and link to healthcare services, by taking cultural explanatory models of health into account
Linking people to appropriate healthcare services, improving access to healthcare (Chaudry et al., 2009; Lovell et al., 2014; de Freitas and Martin, 2015; Christodoulou et al., 2018)	Improved access and linkage in services improves uptake of services
(Adapting) effective mental healthcare therapies (Reijneveld et al., 2003; Kocken et al., 2008; Afuwape et al., 2010; Ünlü Ince et al., 2013; Lovell et al., 2014; Osman et al., 2017; Khan et al., 2019; Eylem et al., 2021; Dubus, 2022)	Cultural adaptation of existing services/culturally developed services improve communication, coping skills, uptake, and effectiveness of services
Inclusion of migrants and ethnic minorities in (mental) healthcare governance (de Freitas and Martin, 2015; Edge et al., 2018 ; Lwembe et al., 2021)	Participation in governance and decision-making increases sense of control, access to services and service uptake

Cultural adaptation of interventions

In general, we could distinguish two types of studies: interventions based on a cultural adaptation of already existing evidence-based interventions and newly developed interventions specifically designed for a certain population group. Those studies adapting existing interventions in a culturally sensitive way did so to various degrees: ranging from the design of the intervention, as a feedback process, during the implementation, adjusting language and translation issues or dealing with the (socio-economic) preconditions to enable participation in the intervention. In addition, interventions were frequently adjusted to a specific culture or target group, taking into account local habits, languages and explanatory models.

Eight studies discussed the cultural adaptation of an existing intervention, see Table 3. As mentioned above, CBT approaches were modified for the specific target groups. Importantly, adopting CBT elements was independent of who delivered the intervention (e.g., expert patients as co-facilitators or professionals such as therapists or GPs) or in which type of setting, thus including e-health interventions

(Ünlü Ince et al., 2013; Eylem et al., 2021), a CBT-based therapy (Khan et al., 2019) or a wellbeing program for primary care (Lovell et al., 2014). Osman and colleagues (2017, 2021) based their intervention on the evidence-based parenting programme CONNECT, which they delivered using a culturally sensitive approach. In the study of Edge et al. (2018), an existing family intervention was adapted by applying a participatory approach with African-Caribbean people diagnosed with schizophrenia, their families, service providers and researchers. Lifestyle interventions were adapted by Siddiqui et al. (2019), focusing on healthy lifestyle habits, and Reijneveld et al. (2003), who adapted a physical exercise program called "Healthy and Vital program". In addition to these single studies, also two review studies discuss culturally adapted interventions (Degnan et al. 2018; Arundell et al. 2021). Degnan et al. (2018) focus on adapted psychosocial interventions for schizophrenia, assessing their effectiveness (see above) and proposing a framework for cultural adaptation. Arrundell et al. (2021) determined the effectiveness of cultural adaptations in psychological intervention for BME groups (see above) and developed a conceptual typology.

The strategies to culturally adapt interventions varied over the different phases of intervention studies, see table 5. In a pre-development stage, preparatory focus group discussions with community members were held to identify adaptation needs (Reijneveld et al., 2003; Lovell et al., 2014; Edge et al., 2018). In the process of intervention development, adaptations made included the (back)translation of intervention materials (Ünlü Ince et al., 2013; Siddiqui et al., 2019; Eylem et al., 2021), modifications in content (Degnan et al., 2018; Arundell et al., 2021) such as modifying concepts and including well-known idioms and metaphors (Ünlü Ince et al. 2013; Lovell et al., 2014; Khan et al., 2019; Eylem et al., 2021), incorporating culture-specific norms and practices (Degnan et al., 2018; Edge et al., 2018;), including cultural models of mental health and illness (Degnan et al., 2018; Edge et al., 2018) and incorporating a broader perspective by including religious or spiritual beliefs (Degnan et al., 2018; Edge et al., 2018; Arundell et al., 2021). During the implementation of interventions, communication strategies were adapted (Degnan et al., 2018; Edge et al., 2018) with attention to culturally-sensitive language use (Ünlü Ince et al., 2013; Degnan et al., 2018; Edge et al., 2018; Khan et al., 2019), socio-cultural barriers and knowledge gaps were addressed through educational approaches (Reijneveld et al., 2003; Osman et al., 2017; Edge et al., 2018; Siddiqui et al., 2019), and investments were made in establishing a culture-appropriate (therapeutic) alliance (Degnan et al., 2018; Arundell et al., 2021). This was done through the involvement of professionals with either a similar background or the same native language knowledge as the target groups (Reijneveld et al., 2003; Osman et al., 2017; Siddiqui et al., 2019) or professionals being culturally competent or "at least 'culturally aware'" (Edge et al., 2018). Attention was paid to cultural sensitiveness in therapeutic assignments, examples, and case stories (Ünlü Ince et al., 2013; Osman et al., 2017; Khan et al., 2019). Some studies adopted a holistic approach to

intervention delivery, involving families or a broader social network (Degnan et al., 2018; Edge et al., 2018). Also, (practical) adaptations were made to increase the intervention's feasibility, such as assuring accessible locations (Degnan et al., 2018; Arundell et al., 2021), adjusting the length or timing of the intervention (Arundell et al., 2021) or providing economic support (Siddiqui et al., 2019).

Table 5. - Strategies for cultural adaptation of existing evidence-based interventions

Strategies for cultural adaptation	
Pre-Development	
Preparatory focus group discussions with community members	Reijneveld et al., 2003; Lovell et al., 2014; Edge et al., 2018
During development	
Back-translation of intervention materials	Ünlü Ince et al., 2013; Siddiqui et al., 2019; Eylem et al., 2021
Modifications of content ● modifying concepts and including well-known idioms and metaphors ● incorporating culture-specific norms and practices ● including cultural models of mental health and illness ● incorporating religious or spiritual beliefs	Ünlü Ince et al., 2013; Lovell et al., 2014; Degnan et al., 2018; Edge et al.,2018; Khan et al., 2019; Arundell et al., 2021; Eylem et al., 2021
During intervention implementation	
Adaptation of communication strategies ● Use of culturally sensitive language	Ünlü Ince et al., 2013; Degnan et al., 2018; Edge et al., 2018; Khan et al., 2019
Educational approach to close socio-cultural knowledge gaps	Reijneveld et al., 2003; Osman et al., 2017; Edge et al., 2018; Siddiqui et al., 2019;
Establishing of culture-appropriate alliance ● Involvement of professionals with similar background or language ● Involvement of culturally competent professionals	Degnan et al., 2018; Arundell et al., 2021
Practical adaptations ● Accessible locations ● Adjustment of length/timing intervention ● Economic support	Degnan et al., 2018; Edge et al., 2018; Siddiqui et al., 2019; Arundell et al., 2021

Participatory approaches

A total of 15 studies described explicitly how they involved members of the target group and communities to enhance the feasibility of the intervention. Based on the descriptions in the articles, the different approaches to community involvement can be situated on a continuum of participatory approaches, ranging from a consultation role to a complete participatory process. We labelled these studies along this continuum: from community-informed (CI) over community-shaped (CS) interventions to community-driven (CD) initiatives (Attygalle, 2020), see table 3. Community-informed studies consulted community members in the preparatory phase of intervention (Lovell et al., 2014), for translation of intervention materials (Ünlü Ince et al., 2013; Christodoulou et al., 2018) or made reference to applying a community-based intervention, but researchers maintained the full control of the intervention study. Community-shaped studies actively involved community members throughout the development or implementation of the intervention. Researchers worked in collaboration with community members to ensure the intervention's cultural appropriateness. This was done by Gater and colleagues (2010) as they developed the group activities in their intervention together with voluntary organisations. In other studies, intervention services were provided by community members, e.g., community health workers delivering the intervention (Afuwape et al., 2010; Hesselink et al., 2012) or giving education sessions (Kocken et al., 2008). In the study of Chaudry and colleagues (2009) female Urdu-speaking drivers picked up Pakistani women to ensure that family or community members did not object to the women going out alone with a taxi driver. Baskin and colleagues (2021) discuss in their scoping review community-centred interventions, which are either implemented in community settings or in a health setting but delivered by the community members and/or the voluntary sector. In the specific study of Lwembe et al. (2017) the researcher was part of the intervention as participant observer to evaluate the use of a co-production approach to improve access to psychological therapies.

Community-driven interventions went a step further and ensured community participation from the start of the intervention development process until its evaluation. This is extensively elaborated in the research report by Edge and colleagues (2018) who co-developed a cultural adaptation of an existing family intervention in partnership with African-Caribbean service users, their families, community members and healthcare professionals. Using a different approach, Malone et al. (2017) developed, implemented, and evaluated an arts-based community intervention to create awareness of suicidality among Irish Travellers in collaboration with the population group throughout the entire research process. Mantovani et al. (2017) used a qualitative participatory approach to pilot an outreach intervention addressing the mental health needs of African and African-Caribbean groups, where faith-based organisations, local public services and community services co-produced the pilot project. De Freitas and Martin (2015) applied the framework of the Participation Chain Model to ensure minority

user participation in a mental health advocacy project. In the 'community conversation' intervention of Knifton et al. (2010), health and BME community organisations designed and delivered supportive workshops to explore mental health and stigma.

These studies demonstrated that community-based initiatives were promising approaches, and they were able to document positive changes in their envisaged outcomes as described above (see interventions' effectiveness).

Barriers and facilitators to intervention uptake

Different barriers impeded the successful implementation of interventions. For instance, the heterogeneity across outcomes and target (sub)groups complicated the cultural adaptation of an intervention (Degnan et al., 2018; Eylem et al., 2021). Some authors mentioned that it was difficult to engage the 'hard-to-reach' target groups for regular health interventions (Reijneveld et al., 2003; Ünlü Ince et al., 2013) and faced poor participation (Hesselink et al., 2012; Lovell et al., 2014). According to Lovell and colleagues (2014), recruitment to primary care trials in the United Kingdom was generally problematic and especially difficult in mental health trials. The complexities of migration-specific barriers complicate recruitment, as well as the development of culturally acceptable and accessible interventions (Lovell et al., 2014). The hindering effect of these external, social determinants were often described. Factors such as employment, financial difficulties, legal status, acculturation, racism, and discrimination, might have a large effect on migrants' and ethnic minorities' mental health status and therefore might reduce interventions' (long-term) effects (Osman et al., 2021). To a similar extent, social problems, many of which are connected to the family context, were brought up by the researchers, especially in those studies describing interventions targeting women. For instance, maltreatment by the husband, problems in raising their children or unavailability of childcare, disabled relatives or divorce were mentioned as impeding interventions' success (Kocken et al., 2008; Gater et al., 2010; Khan et al., 2019). Due to socio-cultural norms, women may experience a lack of autonomy in movement and decision-making, some women expressed that their husband would prevent them from participating in treatment (Khan et al., 2019). The resistance from family members was subject to the stigma on mental health and fear of anticipated disclosure of mental health problems to the 'outside' world (Gater et al., 2010). Maintaining family honour and a need to keep up appearances within the community, hinders these target groups from participating and mental health problems are likely to be covered up (Khan et al., 2019). Mental health stigma was experienced as a major barrier among different target groups (Lwembe et al., 2017; Mantovani et al., 2017; Christodoulou et al., 2018), but at the same time attempted to be broken down by specific intervention studies, such as by Mantovani and colleagues (2017).

Community engagement emerged as a potential facilitator to engage people from target groups more easily (Lovell et al., 2014). People felt connected with a provider or with the intervention itself, when they were able to relate to the content of it, felt being listened to, and experienced their needs to be accommodated (Christodoulou et al., 2018; Eylem et al., 2021). This provided them with a sense of empowerment (Christodoulou et al., 2018), which might disrupt power balances and may give room to dialogical and equitable encounters (de Freitas and Martin, 2015). Making meticulous (cultural) adaptations to the contents and method of delivery to this target group is thus essential (Reijneveld et al., 2003). (Social) connectedness can be facilitated by cultural adaptation of intervention, such as adaptations to language, adaptations in the domains of concepts and illness models, cultural norms and practices, considering explanatory models of illness, incorporating spiritual/religious activities, and acknowledging culture-specific familial structures (Degnan et al., 2018), inclusion of narratives delivered by community service users (Knifton et al., 2010) or making organisation-specific cultural adaptations (Arundell et al., 2021). Another key factor in engaging and retaining participants was engagement with their families (Khan et al., 2019), and also group interventions were evaluated positively in creating this feeling of social connectedness (Lovell et al., 2014). This connectedness can be further enhanced through participatory approaches, by involving migrant health educators (Kocken et al., 2008), training lay health workers from the same community to deliver the intervention (Baskin et al., 2021), using expert patients, and giving ownership of intervention modalities or shared decision-making of stakeholders (Lwembe et al., 2017).

Table 6. -Barriers to and facilitators for successful intervention uptake

Barriers	Facilitators
● Heterogeneity of target (sub)groups and outcomes ● Difficulties in recruitment and participation of target groups because of ○ Migration-specific barriers ○ Socio-cultural norms ● External social determinants impeding long-term effects ● Mental health-related stigma	● Community engagement ● Cultural adaptation of content and method of delivery ● (Social) connectedness through family engagement or group interventions ● Participatory methodology approaches

4.4.5 Discussion and Conclusions

This scoping review mapped and synthesised studies of interventions designed to improve the mental health or mental well-being of migrants and ethnic minority groups living in Europe. Such interventions are highly needed as these groups are at higher risk for mental health problems than Europe's general population (Carta et al., 2005; Marmot et al., 2010; Missinne and Bracke, 2012). Because of structural inequalities in society (Carta et al., 2005; Missinne and Bracke, 2012), stigma associated with mental health (Kocken et al., 2008), language barriers (Bhui and Bhugra, 2004), and different cultural perceptions of what may constitute mental health problems (i.e., differing explanatory models; Lovell et al., 2014), tailored approaches and interventions are required to reach these population groups. Our review shows that attention to meet these specific demands is increasing. Yet, given the result of the limited amount of only 27 studies over a period of 22 years, this calls for a greater investment in documenting mental health interventions. Within the selected studies, the effectiveness of some interventions is manifest, while other described interventions were too small-scale or in a pilot phase and need a larger and long-term implementation to evaluate their impact, which impedes us to draw general conclusions on effectiveness and scalability. However, our synthesis and analysis indicate a strong added value of specifically targeting migrants and ethnic minority groups. We identified successful intervention mechanisms to promote mental health in these populations, such as having a sound theory-base, culturally adapting evidence-based interventions, or applying a participatory approach during the development/adaptation of targeted interventions. In what follows, we first critically discuss the findings of our research objectives: (1) the available interventions and their respective outcomes, (2) the intervention mechanisms and cultural adaptation and participatory strategies used, as well as (3) barriers and facilitators for intervention uptake. We then point out the limitations of the selected studies, as well as of our scoping review. Lastly, based on our findings, we map out recommendations for future research, policy, and practice.

Available interventions and outcomes

The findings of this scoping review contribute to an increasing evidence-base of effective mental health interventions. More than half of the studies reported statistically significant results for their envisaged outcomes. If no significant results were found, relevant precursors to improve mental health were identified. Six out of seven randomised trial studies showed positive effects on mental health outcomes, mostly a reduction in depression rates (Jacob et al., 2002; Reijneveld et al., 2003; Kocken et al., 2008; Afuwape et al., 2010; Osman et al., 2017; Siddiqui et al., 2019). Also, studies acknowledging the difficulty to conduct RCTs under complex real life conditions, were able to demonstrate positive effects (e.g. Hesselink et al., 2012). Furthermore, interventions targeting the social and environmental

circumstances in which they were implemented illustrated positive effects. An intervention aimed at changing social relations by improving parent-child interactions positively impacted the mental health of the parents (e.g., Osman et al., 2017, 2021). Lifestyle interventions promoting and facilitating access to physical exercise (e.g., Reijneveld et al., 2003; Rabiee et al., 2015; Siddiqui et al., 2019) proved to have a positive impact on mental health outcomes. Many smaller and/or qualitative studies indicated promising results or delivered insights into enabling factors for improving mental health and well-being such as improving social functioning (e.g., Hesselink et al., 2012) or increasing knowledge on mental health conditions (e.g., Gater et al., 2010) or direct support from community members or migrant health educators (e.g., Afuwape et al., 2010).

Intervention mechanisms, cultural adaptation, and participatory strategies

Not all studies systematically shared information on their assumed intervention mechanisms. Only few studies described systematically, which (set of) changes were effective, how participatory approaches were exactly implemented, or which preconditions were needed to be in place to successfully implement the interventions. We thus cannot identify uniform mechanisms leading to potential effectiveness. However, this review reveals three principles that may increase an intervention's success: having a sound theory-base, making cultural adaptations, and using participatory approaches. Firstly, our findings show that using a sound theory-base seemed to yield better results (De Silva et al., 2014). The choice for a specific theoretical underpinning determined the choice for respective interventions strategies or elements, such as using CBT elements (Ünlü-Ince et al., 2013), peer-support or participatory strategies to increase empowerment (e.g., de Freitas and Martin, 2015). Making the underlying theory base explicit, made it easier to assess an intervention's effect. In addition, it also makes studies replicable, which is an important consideration for further increasing the evidence base. A thorough consideration of an explicit theory of change can contribute to the sustainability of an intervention's beneficial effects (Mayne, 2020). By grouping the identified intervention mechanisms according to the level of social determinants of health they addressed (see Table 4), we made an effort to fill the gap identified in the literature that current classification systems of mental health interventions do not inherently address health inequities relevant for migrant mental health, such as health disparities based on e.g., ethnic inequities or socio-economic status.

Secondly, cultural adaptations of an intervention increase its acceptability for several reasons. Cultural adaptations enhance the perceived social connectedness among study participants and facilitate access and familiarity with an intervention through the use of cultural reference systems and appropriate language. They contribute to reducing stigma associated with mental health and interventions. Furthermore, culturally adapted interventions consider the specific structural conditions in which many

migrants and ethnic minorities live. The level of cultural adaptation among the reviewed studies ranged from translation of materials (Eylem et al., 2021), over adapting the content of the intervention by including cultural idioms and metaphors (Khan et al., 2019) to broadening the implementation of the intervention by addressing socio-economic circumstances (Rabiee et al., 2015). Drawing general conclusions to what extent cultural adaptations should be made and what their nature should be, is challenging given the diversity of the included studies. However, a one-size-fits-all approach may not address the diverse needs of different migrant and ethnic minority populations. However, involving communities affected may help to tailor the needed services.

Thirdly, the evidence presented here shows that community involvement and participatory strategies – preferably starting from the conceptualisation of the (or: adaptation of) the intervention – facilitate its development and successful implementation. Actively involving the communities not only contributes to solely adapting the intervention itself, but also creates cohesion and empowerment among the participants. Studies showed that including patients and their families as well as community leaders can be essential to overcome recruitment barriers and low participation rates (Lovell et al., 2014; Dowrick et al., 2016; Lwembe et al., 2017; Edge and Grey, 2018; Riza et al., 2020; Baskin et al., 2021). Reasons for reluctance to participate in interventions, such as voluntary nature, stigma, trust issues or lack of appreciation may hinder achieving an intervention's goals (Apers et al., 2021). The extent to which the interventions described in the selected studies were participatory varied considerably: from community-informed where community members were consulted in a preparatory phase (e.g. Lovell et al, 2014), over community-shaped interventions (e.g. Gater et al., 2010), to community-driven participatory approaches as the highest form of involvement towards creating community ownership (e.g. Edge et al., 2018). Studies showed that the use of participatory approaches increased effectiveness as it improved social connectedness, power in local decision-making, and even structural issues such as access to safe and affordable housing (Baskin et al., 2021).

Our findings show that in addition to the above mentioned principles, it is equally important to address the broader socio-ecological community context. Applying a holistic and intersectoral approach is needed, in particular for people and groups living in precarious socio-economic conditions. (Clinical) interventions or treatments for a general audience (e.g. Kocken et al., 2008) have encountered difficulties to address these social determinants. Additionally, financial implications cannot be neglected, calling for free or payable access to health promotion activities. Intervention uptake, however, is facilitated when socio-economic conditions are taken into account, and social contact and cohesion are enhanced (e.g., Rabiee et al., 2015).

Facilitators and barriers for intervention uptake

Applying (a combination of) these intervention mechanisms is thus likely to increase the feasibility and acceptability of mental health interventions among the intended target groups. These strategies contribute to overcoming barriers related to the stigma on mental health complaints by incorporating diverse explanatory models in healthcare (e.g., Lwembe et al., 2017; Mantovani et al., 2017; Christodoulou et al., 2018) or through the co-production of interventions with migrant and ethnic minority communities (e.g., Lwembe et al., 2017; Edge et al., 2018), for instance using artistic approaches (Van De Venter and Buller, 2015; Malone et al., 2017). Also, the holistic nature of many mental health complaints, related to the structural living conditions in which ethnic minorities and migrants live, should be considered to a larger extent (e.g., Knifton et al., 2010; Mantovani et al., 2017). However, hindrances related to these mechanisms should also be acknowledged. Again, the observed heterogeneity of interventions and target groups complicated defining which level of specificity cultural adaptations should have. While interventions often yielded successes in finding coping strategies to deal with mental health problems by introducing direct support from migrant health professionals, it seemed to be far more difficult to increase social support from participants' direct personal environment (Kocken et al., 2008). External, socio-ecological factors, as well as other social problems such as stigma on mental health from the near social environment created resistance to participation. Existing notions on how to engage social networks for all participants were challenged (Chaudhry et al., 2009).

Limitations

Limitations of selected studies

The broad range of described mental health outcomes (e.g., from reducing mental health stigma to reducing suicidal risk) challenges a comparison across studies. While our review identified several examples of pilot and small-scale studies with promising results, many studies were underpowered to assess the envisaged outcomes. These studies should be replicated and evaluated in larger studies using rigorous designs to deliver the needed evidence for upscaling. Additionally, a potential hindrance to scaling up may be the difficulties in the recruitment of participants encountered in several of the intervention studies (e.g., Knifton et al., 2010; Lovell et al., 2014; Van De Venter and Buller, 2015; Christodoulou et al., 2018). Authors mentioned difficulties in defining and reaching the target groups, and reported poor participation (Hesselink et al., 2012; Lovell et al., 2014). This resulted in relatively small sample sizes, short follow-up periods and lack of statistical power. Another review on a similar topic identified transcultural barriers to participation in early intervention research for migrants and ethnic minorities clearly showing a selection bias (e.g., Deriu et al., 2018). The selected studies also did not entail cost-effectiveness measures (with the exception of Afuwape et al., 2010), yet, cost-

effectiveness could be the most convincing argument for policy-makers for scaling-up effective interventions.

The selected articles were also very heterogeneous in terms of the study participants: target groups and inclusion criteria varied across study settings (i.e., specific recruitment criteria), and used different categorisation in different migration and socio-economic contexts. This complicates the comparability of the studies, making it difficult to draw conclusions across studies. Not paying sufficient attention to target-group specific characteristics could also result in overgeneralization (Eylem et al., 2021). Additionally, our scoping review revealed a geographic bias. Most studies took place in the United Kingdom followed by the Netherlands and Sweden, and only a few single studies were conducted in other European countries. This bias could be due to differences in investments in the prevention of mental health and addressing underlying health inequalities. For instance, the Equality Act (2010) in the UK might explain the large amount of UK studies, as it has promoted enquiry into ethnic inequalities (Iliffe et al., 2017) by explicitly focusing on conducting needs assessments, resource allocation, and health care planning (Acheson, 1998). This has positively impacted research opportunities (Mathur et al., 2014).

Study Limitations

Some limitations of this scoping review should also be pointed out. Due to limited resources, we could not include grey literature, hence we might have missed practice-based evidence often reported by local authorities, civil society organisations and health care practitioners (WHO, 2015). Data extraction was done by single authors, and not in duplicate. In line with the methodology of a scoping review, we did not systematically assess the quality of the included studies, yet we critically reflected on their potential flaws. Furthermore, we opted for interventions in Europe only, however, these regions could also learn from the implementation of interventions outside Europe. Using the categorisation of the public health prevention continuum may also present a limitation. Some studies addressed overlapping stages within the continuum, e.g., evidence-based treatment approaches combined with mental health promotion at community level (Eylem et al., 2021; Dubus, 2022). As indicated by Compton and Shim (2020), this framework does not inherently address health inequities relevant for migrant mental health. To mitigate this, we have synthesised the information available on intervention mechanisms according to the different levels of social health determinants. The broad definition of the population of interest, reflecting the lack of a fine-grained definition, made comparisons across studies difficult. Finally, there may be a bias due to the researchers' cultural influences and cultural competency indicating the need to develop cultural protocols for researchers and strengthen researchers' cultural competency.

Recommendations for research and policy

Based on our synthesis, despite the above-described challenges and study limitations, the following recommendations for research and policy can be made.

Research recommendations

First, our scoping review illustrates that evidence on migrant and ethnic minority groups other than refugee and asylum-seekers is scarce and very diverse, few interventions measured the broader social change and reduction in health inequalities and only broadly referred to it in the discussion section. Broadening the scope of research towards other migrant populations would generate more insight into the (common) challenges that these groups face. This could help in addressing the underlying drivers, such as structural issues that affect the mental health of all migrants. Research should invest in studying and addressing the interplay of cultural specificities with socio-ecological factors. Mapping specific mental health outcomes, implemented interventions and outcomes per ethnic minority and migrant group, could work revealingly (Uphoff et al., 2020).

Second, our review shows little consistency in defining study populations when considering these 'other migrant groups' (e.g., few studies differentiated between first- and second-generation migrants, studies were based on language spoken by participants, studies focussed on 'hard-to-reach' migrant groups, etc.). To achieve better comparability across studies, future research will therefore benefit from a more streamlined and fine-grained definition of the different categories of migrant population groups, as well as the studies' geographical location. Studies should clearly specify how migrant and ethnic minority populations are defined, i.e., per migration community, legal status, cultural and/or religious background. In doing so, future research could specify per migration community, drivers of migration and cultural similarities with the dominant country. This could further facilitate the understanding of and subsequent narrowing health inequality gaps in different contexts (Lebano et al., 2020; Van Apeldoorn et al., 2022).

Third, while stakeholder participation and intersectoral approaches are acknowledged, most interventions remain at the individual level. Participatory interventions, however, not only demand good communication, dealing with linguistic barriers and cultural differences, but also close collaboration of all stakeholders, ranging from governmental actors to ethnic minority and migrant communities (Riza et al., 2020). There are some promising studies – mostly qualitative accounts of participatory initiatives – to improve mental health outcomes among migrants and ethnic minorities in the EU/EE, but there is a paucity of high-quality evidence regarding these approaches. More studies should look into community-based or community-led approaches.

Fourth, many intervention studies insufficiently considered outcome measures that assess a holistic approach to mental health, and mainly focus on depression or anxiety scales to evaluate interventions. More in-depth analyses on the impact of the different intervention stages could be insightful and yield distinct mental health outcomes as well as the preconditions to successful implementation. In particular, intervention and implementation research would be needed in developing multi-level interventions, addressing both proximal and distal intervention outcomes. From a public health point of view, investments should be made in social and health systems research that addresses the quality of mental health interventions taking into account the socio-cultural and socio-economic contexts and approaches (Haro et al., 2014). Future research should systematically assess the specific preconditions for interventions to be effective and to reach the intended target group, as well as its cost-effectiveness (Afuwape et al., 2010).

Fifth, given the gender gaps in mental health complaints, a more gender-based approach in interventions are needed, and attention should be paid to how gender intersects with other social determinants of mental health and ethnicity (Bhugra, 2004; D'Souza and Garcia, 2004; Van De Venter and Buller, 2015; Baskin et al., 2021). Also, given the explicit focus in some studies on women (Jacob et al., 2002; Kocken et al., 2008; Chaudhry et al., 2009; Gater et al., 2010; Hesselink et al., 2012; Khan et al., 2019), for instance when focusing on post-natal and maternal related mental health (Hesselink et al., 2012; Khan et al., 2019), or depression (Gater et al., 2010), it would also be of added value to focus more on men. Understanding their specific explanatory models on mental health, perceived masculinity, and power dynamics in the household would give insights in potential barriers to mental health services. In turn, this could improve both men's and women's participation in interventions on mental health.

Policy recommendations

Some policy recommendations can also be formulated. A holistic approach to mental health, considering the potentially differing explanatory models between healthcare practitioners and ethnic minority groups and migrants, as well as the socio-economic circumstances in which most migrants and ethnic minorities live, needs to be implemented in future interventions and policies. It is important that the social determinants defining ethnic minorities' and migrants' vulnerabilities to mental health problems are addressed. However, as we ranked the studies in Table 4 according to the levels of social determinants, we conclude that only few interventions target the resettlement stressors, such as socio-economic and living circumstances, legal residence procedures, detention procedures, and experiences of discrimination and racism (Priebe and El-Nagib, 2016; Lindert et al., 2017; Nosè et al., 2017; Von Werthern et al., 2018). This might be explained by the fact that structural factors are difficult to change and might require structural policy adaptations, such as an intersectoral health-in-all approach (WHO, 2015). However, addressing the societal context is crucial for prevention strategies, as it is often where

the mental health challenges that these groups are confronted with arise (Marsella, 2011). This requires a holistic and interdisciplinary approach, involving governmental actors who have the power to influence harmful structural factors. Hence, policy makers should invest in efforts to streamline services so they fit and interact better together to facilitate the implementation of a holistic approach. Some authors argued (Arundell et al., 2021) that culturally adapted care is needed, in which all interventions, services and treatments are suited for different cultural values, patterns, behaviours and beliefs. This could start with a better representation of ethnic diversity within the healthcare systems, as noted by Baskin et al. (2021).

Furthermore, needs assessment, tailored health care planning and resource allocation (Acheson, 1998) could be facilitated by the registration of ethnicity, and migration background (Lebano et al., 2020; Van Apeldoorn et al., 2022). This way, the needs of local ethnic minority and migrant groups, as well as the specific risks and needs concerning mental health, could be better assessed to make healthcare culturally adapted (Arundell et al., 2021), and to foresee some targeted additional interventions oriented at reducing mental health complaints of ethnic minority and migrant groups. Finally, medical interventions, healthcare systems and practices undergo constant transformations, such as digital transformations in communication, assessment, and follow-up. More attention should be paid to a still existing digital divide for migrants and ethnic minorities, which COVID-19 has revealed (Nöstlinger et al., 2022). More insights are needed into accessibility, cultural attitudes, and migration-specific experiences of such digital tools (Marwaha and Kvedar, 2021).

CHAPTER 5: DISCUSSION AND CONCLUSION

In what follows, I discuss the essential findings of my dissertation, illustrating their contributions to the theoretical and scientific foundations of my research. Subsequently, in the second section of this chapter, I acknowledge the various limitations within my research and propose recommendations to guide future studies in the field based on the discussed limitations. In the third section, I outline essential recommendations for both policy and practice, aimed at enhancing mental healthcare services for migrants. These policy recommendations are based on the empirical outcomes of my qualitative fieldwork, combined with insights from the existing literature. Finally, in closing this chapter and dissertation, I provide a comprehensive summary of the central conclusions drawn from my work.

5.1 Discussion of the findings

This research is the first to explore the mental health understandings among East-African migrants living in Belgium. Additionally, it offers new insights in the perspectives held by healthcare professionals regarding these models. The research results underscore the critical importance of considering both explanatory models held by migrants and professionals in the context of healthcare, for two reasons. First, as the answer to my first research objective illustrated in article 1, the explanatory models of mental health among East-African migrants play a pivotal role in shaping their healthcare seeking behaviour. East-African migrants' carry with them pre-existing explanatory models of mental health prevalent in their countries of origin. Depending on their familiarity with the dominant explanatory model or their openness to it, some migrants adapt, modify or extend these pre-existing models in response to their experiences in the post-migration environment. For healthcare services seeking to effectively engage with and support East-African migrants, it is crucial to gain insight into how these individuals conceptualize and perceive mental health, as well as how these perceptions may evolve over time.

Second, as discussed in article 2 answering my second research objective, my research findings indicate that healthcare professionals who encounter East-African migrants as patients in their consultation room, perceive differences within their and the migrants' explanatory models of mental health, which influences their healthcare practice. Those professionals who are more acquainted with the models of their patients, perceive it as an asset to facilitate effective communication and treatment. Therefore, it is imperative for healthcare professionals to take into account both their own explanatory models and those of their patients when delivering care.

Nevertheless, my research findings indicate that concentrating solely on explanatory models during therapeutic interactions is insufficient for improving the healthcare approach, as demonstrated in

articles 1, 2, and mainly in article 3, which provides an answer to my third research objective. Participants' experiences highlight that the Belgian healthcare system falls short in effectively addressing cultural disparities. Both participant groups have voiced concerns about the inadequate provision of culturally sensitive care within the Belgian healthcare system. They argue that adopting a more holistic approach integrating migrant communities could significantly benefit the healthcare system. In addition, the outcomes of my empirical research also point to the necessity of incorporating the impact of the broader socio-political and integration-related context in which migrants live. Both participant groups pointed to the detrimental effects of the reception and integration procedures.

These claims find support in the results of the scoping review, article 4 addressing my fourth research objective. To address this need for successful interventions to improve mental health, existing evidence-based interventions were scrutinized. Three key strategies for the development of successful interventions were deducted: having a sound theory-base, making cultural adaptations, and using participatory approaches. It is noteworthy that even though the discussed interventions acknowledge the broader societal context as a significant factor contributing to the mental health problems among migrants, there remains a shortage of effective strategies that specifically address the broader societal context.

In the subsequent sections, a more detailed individual discussion of these findings will be presented.

5.1.1 The importance of considering explanatory models of mental health

5.1.1.1 East-African migrants' pre-existing explanatory models of mental health

The way in which migrant participants articulated their and their community's comprehension of 'mental health' (article 1) aligns with international literature, highlighting a significant divergence between the understanding prevalent in African countries dominant diagnostic frameworks used in the Global North (Fernando 2002; Mendenhall et al. 2019; Mölsä, Hjelde, and Tiilikainen 2010). It starts with what is understood to be related to mental health. The migrant participants in my research indicated that in their countries of origin, mental illnesses were associated with behaviours considered as 'crazy'. This is indeed reflected in studies on local conceptualizations of mental health in African countries (Fauk et al. 2022; Teferra and Shibre 2012; Ventevogel et al. 2013) in which for instance, the frequently cited example 'running naked' by the study participants is also mentioned as a symptom of 'craziness'. Within the conventional diagnostic framework in the Global North, such behaviour would be categorized as severe mental disorders, like psychosis or schizophrenia (McCann et al. 2018). Feelings of what would be categorized in the Global North framework as 'depression' or 'anxiety disorders' were often viewed as normal reactions to difficult life circumstances rather than medical or mental disorders, which is again consistent with findings from other studies (Amuyunzu-Nyamongo 2013; Linney et al. 2020; Makanjuola

et al. 2016; Teferra and Shibre 2012; Ventevogel et al. 2013). This differentiation between what is considered 'normal reactions' and what is considered a 'mental illness' contributes to the stigmatisation of mental health. Migrant participants explained that suffering from mental health problems – and thus being seen as 'crazy' - excludes a person, and to a larger extent his or her family, from society. Stigmatization of mental health problems exists in various cultures worldwide, (Abdullah and Brown 2011; Gopalkrishnan 2018; Kim, Yalim, and Kim 2021; Zolezzi et al. 2018), as well as in Belgium (Pattyn et al. 2014)). However, cultural aspects may indeed influence its manifestation (Misra et al. 2021; Yang et al. 2014). Cultural influences were also evident in the migrant participants' causal explanations of mental health problems. They mentioned socially and religiously embedded explanations for developing mental health problems, such as disputes with loved ones or a challenge given by God. Previous research on causal attributions among Africans has indeed pointed to the significance of causality that is rooted in social and religious spheres (Gopalkrishnan 2018; Grupp et al. 2018; Mayston et al. 2020).

Although frequently emphasized in literature (Fernando 2002), the distinction between the 'body' and 'mind' as two separate entities appeared to be of lesser importance in the study findings. Migrant participants acknowledged the differentiation between the two while emphasizing their interconnectedness, but no clear distinction from the framework used in the Global North could be deduced. For example, the symptoms of mental health problems expressed by the migrant participants were not solely manifested through bodily symptoms, but they also utilized idioms of distress such as 'thinking too much' (Mendenhall et al. 2019).

As described in article 2, similar disparities in the understanding of (mental) health were observed by healthcare professionals with their patients of sub-Saharan African descent. The observed disparities in the understanding of (mental) health among patients with a SSA migration background. These disparities were mostly attributed to differences in causal beliefs and aligned with existing international academic literature. Professionals emphasized the significance of religious and supernatural causes and the collective and social nature of health beliefs (Gopalkrishnan 2018; Grupp et al. 2018; Helman 2007; Patel et al. 1995). They also expressed the influence of these causal attributions on healthcare-seeking among these patients, where religion played a vital role: prayer and maintaining belief in God, and seeking help among religious leaders were mentioned as coping strategies (Kewley 2018; Markova and Sandal 2016; Ward, Clark, and Heidrich 2009).

5.1.1.2 East-African migrants' healthcare-seeking behaviour

Initially, as described in article 1, migrant participants admitted to refrain from seeking mental healthcare unless they reached a point where they felt incapable of managing the issue, and then help was sought, or imposed by family members. Indeed, migrant populations tend to seek conventional mental health care services only when their problems are severe (Maier, Schmidt, and Müller 2010;

McCann et al. 2018). The decision on what healthcare to seek, is influenced by how migrant participants perceive the issue to be connected to mental health. They explained that issues related to depressive or anxious thoughts could be resolved through social and emotional support within formal networks, such as friends, religious networks, and the community, which is supported in literature (McCann et al. 2018; Ventevogel et al. 2013). Also, stigma plays a significant role in shaping mental healthcare-seeking behaviour (Corrigan, Druss, and Perlick 2014; Salami et al. 2017). Participants acknowledged to be reluctant to seek mental healthcare, as this would cause people to gossip about them, and they could be excluded from their community. Migrants may indeed avoid seeking help due to shame, fear of gossip, and social exclusion (Knipscheer and Kleber 2008; McCann et al. 2018). Related to their causal attributions of mental health problems, religious convictions strongly influenced the healthcare-seeking strategies of the participants, with many seeking help through prayer, treatment with holy water, or by consulting religious leaders. This is confirmed in other international studies (Amuyunzu-Nyamongo 2013; Teferra and Shibre 2012; Ventevogel et al. 2013). However, traditional or spiritual healers are less accessible in destination countries, leading some migrants to seek such care transnationally by using WhatsApp or travelling home if possible (Thomas 2010). Research has shown that transnational healing practices can augment personal, as well as family resilience (Tiilikainen & Koehn 2011).

Dynamic change in explanatory models and its influence on healthcare-seeking behaviour

An innovative objective within this study was to consider the role of migration in the explanatory models of mental health among this migrant population. The results show that East-African migrants' explanatory models are indeed dynamic and subject to change (Williams and Healy 2001) as some participants expressed to experience a transformation in their explanatory models through the process of integration and familiarisation with Belgian medical discourses. They perceived less stigma in the Belgian context compared to their country of origin, and therefore felt more openness to discuss the topic – although within their African communities living in Belgium - they experienced the same presence of stigma as within their countries of origin. This changed their categorisation of certain problems, such as stress, where they now saw them as mentally health-related. Consequently, this influenced their attitude towards mental healthcare, as they expressed to be more receptive to accessing conventional mental health services in Belgium. Also, participants who were familiar with the dominant approach to mental health in the Global North before migration, were more in favour of conventional Belgian mental healthcare than those who were not. These were particularly young participants from urbanized backgrounds or participants with prior experience in urban healthcare services in their country of origin. Urbanization is indeed linked to help-seeking behaviour, where people with a rural background rely more on culturally based, spiritual or religious health care (Knipscheer and Kleber 2008). These findings suggest that acculturation strategies, which refer to whether and how

individuals adapt to a new culture (Berry 1989, 1997, 2001, 2006), are linked to whether and how explanatory models of mental health and related mental healthcare-seeking behaviour. Individuals who may lean towards an 'assimilation' or 'integration' acculturation strategy are likely to be more inclined to embrace the dominant explanatory model of mental health. Conversely, those adopting a 'separation' or 'marginalization' acculturation strategy are more prone to reject the dominant explanatory model of mental health. Previous research among West-African migrants in the Netherlands supports similar findings (Knipscheer and Kleber 2008), and other studies with different migrant groups indicate that the level of social integration plays a significant role in the use of conventional services (Kirmayer et al. 2007). This observation may hold equally true for the acculturation strategy of the dominant society. Integrating mental health services with community members, such as religious leaders and other influential role models, has been proposed to orient migrants toward conventional services, aligning with transcultural mental health practices that advocate for inclusion of cultural and religious values in healthcare (Fauk et al. 2022; Marsella 2011).

5.1.1.3 Professionals' healthcare practices

Professional participants acknowledged the diversity in explanatory of mental health among their sub-Saharan African patients and recognized how these models influenced their practices (article 2). They mentioned difficulties with language and conceptual interpretations within their treatments. Language barriers are often mentioned in transcultural research (Giacco et al. 2014; Sandhu et al. 2013), but as indicated by the professionals, addressing cultural issues goes beyond sharing a language and requires a broader understanding of their patient's explanatory model of mental health and cultural context (Arafat 2016; Gopalkrishnan 2018). The professionals also acknowledged the limitations of their own explanatory models and at times did not feel equipped enough to treat patients with a diverse explanatory model. Their diverse backgrounds, positions, and self-reflexivity led to a varying range of consideration of culturally different explanations of mental health in their treatment context. While all professionals recognized the role of culturally different explanations in their patients' narratives, they employed various treatment approaches with differing emphasis on these explanations. Personal and professional explanatory models and preference for treatment approaches often became intertwined due to the influence of institutional ideologies.

An innovative aspect of this part of my research lies in the comparison of professionals who have and do not have a similar migration background, to explore if healthcare professionals who were more familiar with the explanatory models of (mental) health prevalent among their patients with a SSA background were better equipped to adapt their treatment approaches accordingly. Indeed, the results indicate that this familiarity facilitated improved communication and treatment practices. They employed an integrative practice approach by using linguistic concepts from their patients' explanatory

models to enhance treatment compatibility. These findings support the argument that mental health professionals should strive to reconcile different explanatory models during consultations (Bhui and Bhugra 2004). Additionally, professionals with a similar migration background as their patients reported greater trust from the patients, presumably due to patients feeling recognized in their cultural identity. This aligns with previous findings that a shared explanatory model enhances patient satisfaction in treatment and strengthens the patient-practitioner rapport (Bhui and Bhugra 2002; Marsella 2011; Mollah et al. 2018). Professionals without a migration background attempted to address cultural differences by employing what they called "culturally sensitive" practices. They explored potential cultural references in their patients' narratives, and adopted a more holistic approach by involving the broader community and family support systems, which are indeed valuable strategies to overcome cultural disparities (Marsella 2011; O'Mahony and Donnelly 2007).

5.1.2 Need for a holistic approach

5.1.2.1 A critical look at the Belgian healthcare system

Professional participants felt that the current healthcare system in Belgium lacks proper training for professionals and a supportive platform for a holistic approach (article 2). They felt that it was not only up to them to provide culture sensitive care. Indeed, too often, the responsibility of providing culturally sensitive healthcare falls on the individual health professional (Horvat et al. 2014). Both participant groups shared similar suggestions to enhance the cultural appropriateness of the Belgian healthcare system (article 3). They criticized the limited diversity of healthcare personnel and advocated for involving culturally diverse professionals. Research on this topic has indeed shown positive outcomes in increasing the acceptability and access to mental health services for culturally diverse communities (Fauk et al. 2022; Salami et al. 2017). Health systems should strive for equity by fostering a hybrid system where professionals of diverse backgrounds, especially those from the communities involved, are well represented (Gopalkrishnan 2018; Wendt and Gone 2012). Both professional as migrant participants proposed a more inclusive approach involving cultural communities in the healthcare system. International literature supports the importance of holistic health services and highlights the positive effects of incorporating community-based ethnocultural services (Marsella 2011; O'Mahony and Donnelly 2007). This underscores the notion that 'integration' is a reciprocal process, wherein the dominant society also engages in an acculturation strategy (Berry 2001). By applying a multicultural acculturation strategy, where a health system incorporates and accommodates the interests and needs of the cultural groups, trust could be fostered among migrants. Integrating cultural and religious organizations can play a crucial role in connecting migrants with the conventional healthcare system, community or religious leaders could act as a bridging figure between the community and the

healthcare system. Practices that reflect religious or supernatural beliefs can stimulate hope and strength, and be a source for resilience and healing (Choudhry et al. 2016; Gopalkrishnan 2018). Furthermore, integrating cultural and religious communities would facilitate the dissemination of information on mental health services effectively, increase referrals to mental health services, overcome cultural stigma, and address complex needs (Giacco et al., 2014; Fauk et al., 2022; Kim et al., 2021).

5.1.2.2 The socio-political context

From my research, it becomes evident that when addressing mental health inequalities, it is important to take the socio-political context into account (all articles). Considering cultural differences in (mental) healthcare practice is a multifaceted issue that goes beyond the therapeutic alliance (Marsella 2011). Both professionals and migrant participants attributed mental health issues among migrants to post-migration and integration stressors in Belgian society. They highlight the impact of external environment factors on health, a point that should not be ignored (Marsella 2011). Both groups therefore draw attention to the detrimental effects of the Belgian reception and integration system, which at times is a driver for social exclusion, discrimination and racism. They criticized the complex and lengthy procedure of the current reception system in Belgium for causing mental health problems among migrants. Indeed, previous research has demonstrated a connection between several post-migration stressors and the perception of an unjust reception system, as well as a pervasive sense of uncertainty (Haas 2020). The participants further referred to issues of unemployment, temporary and an unsecure residence status, and poor social integration as driving factors for increased mental health suffering among migrants, which is confirmed in other studies (Giacco et al. 2014; Voglino et al. 2022). Both participant groups argued that it to tackle mental health problems among migrants, the broader environment and living context should be taken into account. Tackling a broad range of social, economic, and integration challenges faced by these populations is indeed crucial for reducing their incidence of mental health problems and improving their mental health outcomes (Priebe et al. 2016). Ideally, culturally appropriate mental healthcare initiatives should extend beyond healthcare to other sectors, such as social care, housing, and labour, to minimize the harmful effects of social determinants related to migration and integration (Kim et al., 2021; Salami et al., 2017, 2019).

5.1.3 Developing successful interventions

In article 4, a theoretical and evidence-based foundation is provided, extending and reinforcing the conclusions drawn from my empirical research. Through a comprehensive analysis of the literature, I identify promising evidence-based interventions to improve mental health among migrants and ethnic minorities. Based on the review results, three general principles to develop interventions for any

population group with a migration background are proposed. These three principles are: having a sound theory-base, making cultural adaptations, and using participatory approaches. First, clearly outlining an underlying theory makes it easier to assess an intervention's effectiveness and increases the replicability of studies, thereby contributing to the evidence base. Additionally, a thorough consideration of an explicit theory of change can contribute to the sustainability of an intervention's beneficial effects (Mayne 2020). Second, making cultural adaptations of existing interventions improves their acceptability and implementation. Adaptations can be made at different levels, and can range from translating materials to addressing socio-economic circumstances. Thoroughly made adaptations facilitate access and familiarity by using cultural reference systems and appropriate language, enhance social connectedness among intervention participants, and can reduce stigma associated with mental health. Furthermore, culturally adapted interventions consider the specific conditions faced by many migrants and ethnic minorities. Third, through community involvement and participatory strategies, ideally starting from the conceptualization or adaptation of the intervention, the development and successful implementation of an intervention is facilitated. Actively involving communities not only contributes to successfully adapting an existing intervention but also fosters cohesion and empowerment among participants. It helps to reach the targeted population group more effectively by overcoming recruitment barriers and low participation rates. These principles help in overcoming various barriers associated with mental health problems within migrant population groups by incorporating diverse explanatory models of health, or by co-producing interventions in collaboration with migrant and ethnic minority communities.

The review results also acknowledge that, in addition to these three principles, it is equally crucial to consider the broader socio-ecological context of the targeted communities. However, a gap in the literature is addressed through the categorisation of the identified intervention mechanisms according to the level of social determinants of health they addressed, specifically focusing on health inequities relevant to migrant mental health, such as ethnic disparities and socio-economic status. Our results showed that few interventions target a broader societal context, while it is there that many mental health problems arise. Applying a holistic and intersectoral approach to address mental health problems is particularly important for individuals and groups living in precarious socio-economic conditions. Standard interventions for the general population often struggle to address these social determinants effectively (Kocken, Zwanenburg, and de Hoop 2008). Moreover, financial implications must not be overlooked, necessitating free or affordable access to health promotion activities (Rabiee, Robbins, and Khan 2015). Considering socio-economic conditions facilitates intervention uptake and enhances social contact and cohesion.

5.2 Limitations and suggestions for future research

While this doctoral research has provided invaluable insights in relation to the envisaged research objectives, it is also subject to limitations. It is worth noting that this is an independent doctoral research, not part of a larger research project. Consequently, constraints related to time and resources influenced my data collection and analysis, along with the unfortunate period of the Covid-19 crisis, which disrupted initial plans. In the earlier section on positionality, I have discussed how my choice for the theoretical underpinning and applied methodology were shaped by my educational background and personal interests. Study-specific limitations and recommendations for future research have been discussed in the individual articles within the preceding chapters. In what follows, I will address overarching limitations and provide research suggestions related to the choice of my research methodology and the overarching theoretical framework.

5.2.1 The choice for qualitative research among East-African migrants

The qualitative nature of the research requires acknowledging that the findings represent the subjective interpretations of a specific group of participants. While the participants were purposefully selected to represent a diversity of East-African migrants, the views expressed may not necessarily reflect the views held by every member of these migrant communities and people coming from these regions (Teferra and Shibre 2012). It is important to bear in mind that the East African migrants living in Belgium, are very diverse, within and between regions of origin. Therefore, the interpretation of my findings should be approached with care, keeping in mind the potential limited transferability of these insights to other contexts or populations. In addition, the availability of limited translation resources restricted participant selection to individuals who could communicate in English, French, or Dutch, reflecting the researcher's language proficiency. Consequently, a selection bias with respect to educational or urban backgrounds may have occurred. The selection of professionals was targeted towards those engaged with patients of Sub-Saharan African descent, with a particular emphasis on comparing those with and without a similar cultural background. It is worth noting that this focus may have resulted in the representation of a specific subgroup, as the cultural diversity among Belgian healthcare professionals is relatively limited.

However, in qualitative research, the focus is on carefully selecting a well-founded and targeted sampling of research subjects, which enables a more comprehensive and insightful analysis, rather than having a big group of participants (Meyer 2015). The choice for qualitative methods is especially relevant in the context of migrant mental health research (Palinkas 2014), as it elicits perspectives with unique cultural backgrounds and who are often not implied in regular research. By using qualitative methods, a deeper understanding of their specific context is gained. This PhD-study sought to be explanatory and

aimed to provide in-depth insights to advance the limited evidence available on this topic. Within both empirical studies, data saturation ensured richness and depth of the data shared by the participants. Reaching the point where no new information emerges, the studies captured a comprehensive range of views and nuances, leading to a richer and more in-depth understanding of the topic. I acknowledge the fact that my sample of participants might not be representative for the whole East-African migration population. Nevertheless, my research resulted in both theoretical and practical insights, indicating the dynamic nature of explanatory models in the context of migration, as well as the relevance of considering explanatory models in mental healthcare. Furthermore, I aimed my research to serve as an eye-opener indicating that paying attention to explanatory models of mental health among culturally diverse populations, deserves attention in policy and practice, as well as requires more research.

I propose that the Belgian research community should strongly consider undertaking a more extensive and expanded investigation into the explanatory models of mental health held by diverse migrant groups and also consider the diversity within these groups. The current literature on mental health among migrants living in Belgium is fragmented, with most research centring around specific migrant subpopulations or particular research themes (for instance, Derluyn, Broekaert, and Schuyten 2008; Levecque, Lodewyckx, and Bracke 2009; Vervliet et al. 2014). There is a need for the inclusion of larger-scale research initiatives encompassing a wide range of migrant populations. By broadening the scope of research and actively engaging with the diverse voices and perspectives within Belgium's migrant populations, a more inclusive and culturally sensitive approach to mental health research can be installed. In terms of methodology, I would build further on my initial ideas (which were impeded due to the Covid-19 crisis) and suggest future research on the topic to use creative and participatory approaches next to more traditional research methodologies. These methodologies might offer a more holistic and inclusive perspective, that can fully grasp the complexity and diversity of sensitive and abstract concepts of explanatory models. For instance, researchers might use photo-voicing techniques, in which participants can use a visual method to express what they relate to mental health or how to deal with mental health problems (Han and Oliffe 2016). It allows for the exploration of sensitive topics without relying solely on verbal communication, making it particularly effective for studying abstract concepts like mental health, which can be challenging to articulate directly. An example of participatory research could be that the researchers form partnerships with community organizations and co-design interventions with input from community members (Apers, Richter, and Van Praag 2021). This approach fosters a more inclusive and bottom-up understanding of explanatory models.

5.2.2 The choice for the theoretical concept of 'explanatory models'

Explanatory models, as a theoretical concept, serve as valuable frameworks for understanding how individuals perceive and interpret various aspects of mental health (Dinos et al. 2017; Kleinman et al. 1978). In the context of healthcare, explanatory models can offer crucial insights into how people conceptualize and make sense of their own health, guide their decisions and behaviour related to seeking healthcare (Bhui and Bhugra 2002; Dinos et al. 2017). While these models can provide a deeper understanding of cultural perspectives, it is equally essential to recognize and critically examine their limitations.

Since the concept of 'explanatory models' found its introduction in the fields of anthropology and psychiatry (Kleinman et al. 1978), a few criticisms have been voiced. Within my research, I have tried to be mindful about these criticisms and aimed to interpret and apply the concept with careful consideration. An early criticism on the concept when it was first introduced, was highlighted by Allan Young (1981). He stated that the explanatory model approach tends to be overly rationalistic, assuming that people always have elaborate or coherent models of illness. He argued that this assumption may not hold true, particularly when people are unfamiliar with symptoms or illnesses. While I recognize this as a potential pitfall of theoretical approach concept, I believe that this rationalistic assumption can be effectively addressed within the practical application of the explanatory model framework. Various research endeavours to acknowledge, compare and accommodate different notions of health and illness in a globalizing world, have revealed different applications of the explanatory models framework (Weiss and Somma 2007). Among these, a more comprehensive formulation has been emerged, dedicated to interpreting the role of cultural context in understandings on health and illness. I applied this approach in my research, refraining from assuming that individuals intentionally engage in abstract reasoning about how they conceptualize mental health. Instead, I took a thoughtful, indirect approach to eliciting the explanatory models of my research participants. Starting from an "un-knowing" position and employing descriptive scenarios at the beginning of my interviews, my intention was to evaluate the migrants' explanatory model of mental health through a bottom-up, indirect approach that does not necessitate a rational comprehension of the concept of mental health.

Another concern regarding the use of the concept of 'explanatory models' is the potential oversimplification of complex cultural beliefs, and therefore reinforcement of cultural stereotypes (Weiss and Somma 2007). Explanatory models aim to provide a comprehensive understanding of how individuals from diverse backgrounds perceive and explain health and illness. However, cultural beliefs and practices are often multifaceted, shaped by historical, social, and environmental factors. Additionally, each person's understanding of mental health is unique, shaped by personal experiences,

socioeconomic status, education, and various other factors (Jimenez et al. 2012). Reducing these complex belief systems to a singular explanatory model can lead to oversimplifications and may overlook essential nuances and unique perspectives. Related to that concern, another critique highlights that the concept of 'explanatory models' disregards the larger societal, social and political influences on these models (Dein 2003). For example, in my specific research, the framework and organization of healthcare in the East-African migrants' countries of origin, where only limited mental healthcare may be available for severe cases, can also influence their explanatory models of mental health. The interpretation of only severe problems being related to 'mental health' among the migrant participants may therefore not be culturally framed, but due to the organizational structure of mental healthcare in participants' countries of origin. By prioritizing cultural understanding over local and global power relations, explanatory models may disregard the larger societal influences. Throughout the data collection and analysis, I have been careful not to oversimplify the complex cultural beliefs of the participants or to overlook the diverse experiences individuals may have. I have taken into account that individuals may hold multiple and sometimes conflicting explanatory models that can evolve over time (Weiss and Somma 2007). Moreover, this is one of the central conclusions within my research, as I illustrate that the migration trajectory and influence of other dominant perspectives on mental health influence and change the explanatory models among the migrant participants. Recognizing that explanatory models are not fixed and static cognitive representations allows for a more nuanced understanding (Kirmayer and Bhugra 2009), which I have translated in my research results. Moreover, I have highlighted the significance of not only considering explanatory models but also recognizing the broader context and societal impacts of migration and integration on the mental health of migrants.

In 2021, Jarvis and Kirmayer (2021) proposed the term 'cultural frames', following their longstanding work on explanatory models and illness narratives among culturally diverse populations. The 'cultural frames' concept offers a more contextualized approach compared to 'explanatory models' as it incorporates the broader societal context and an implicit way of life. 'Cultural frames' encompass a range of cultural influences, norms, and historical factors that shape how individuals within a particular community perceive and respond to mental health issues. I would, therefore, like to propose that future research initiatives consider integrating the concept of 'cultural frames.' By doing so, researchers can gain a deeper understanding of the intricate interplay between individual explanatory models, cultural contexts, and the social and historical factors that influence mental health perceptions and practices within specific communities. Furthermore, it is important, certainly in the context of migrant mental health research, that the dynamic character of explanatory models is acknowledged. It would therefore be interesting if future research could build further on this dissertation's results and investigate the influence of the migration and integration trajectory on the (changing) nature of these explanatory

models or frames further. Specifically in the Belgian research context, little research questions the definition of what encompasses 'mental health' among migrants. To my knowledge, only one study describes different frames of mental health among diasporic Muslims (Rondelez et al. 2018). Belgian researchers could adopt a more dynamic view of different migrant groups' mental health meaning and experience. Through a focus on eliciting migrants' narratives and meanings of mental health (Kirmayer and Bhugra 2009), researchers could explore how the specific cultural beliefs and practices influence how diverse migrant communities search for and make use of (mental) healthcare. By uncovering commonalities or discrepancies among various migrant groups, research has the potential to signal whether a broad, inclusive 'migrant-friendly' approach would be adequate or if there is a necessity for tailored mental health interventions targeted at specific migrant groups.

Additionally, earlier research in Belgium exposed that healthcare professionals do not feel comfortable in caring for people with a migration background and often project their own frame of reference (Claeys et al. 2022). Future research, building upon my findings, could focus on investigating how insights into diverse explanatory models or cultural frames can assist Belgian healthcare professionals, including those with limited experience in treating migrant patients, in effectively navigating the complexities that cultural differences bring to practice. Studies could be set up to assess, for instance, the impact of a training program on explanatory models among migrants healthcare professionals on their abilities to feel more confident in providing culture-sensitive mental healthcare.

5.2.3 The implicit focus on vulnerability

Related to the choice of focusing on the implications for mental healthcare, the direction of my research implicitly focused on the negative side of migrants' mental health and highlighted the challenges and disparities faced by this population. While recognizing and addressing vulnerabilities is crucial for providing targeted support and interventions to improve the mental health of migrants, it is also limiting. It may have overlooked the resilience, strengths, and diverse experiences that migrants and their communities bring to the table. It is important to note that not all migrants experience the migration and integration-related risk factors equally, and some may be more resilient and able to cope with the challenges of migration (Priebe et al. 2016). Certain migrants may find advantages in their migration experience and the opportunities presented in the host country, such as a better socio-economic position compared to their position in the country of origin, leading them to develop increased resilience. The presence of resilience factors, such as social support, positive coping strategies, and personal attributes, can also assist migrants in navigating challenges and avoiding the development of mental health problems (Dubus 2022). I have tried to include this important nuance throughout my data collection with the migrant participants, by also inquiring into the sources of

strength in their lives and how they navigate adversities. In the introductory chapter of this dissertation, I dedicated a section to resilience and coping strategies, shifting the focus away from solely emphasizing the vulnerabilities of migrants. Furthermore, I made an effort to underscore the importance of adopting a strengths-based approach in the recommendations outlined in my articles. In the second article on the healthcare-seeking behaviour, I described the already existing successful coping strategies among migrants, and recommend the active involvement of East African migrants' social and emotional support systems, such as their religious or community networks, in sensitisation and healthcare programs. Within the fourth article, this recommendation is further backed by our review results that using a participatory approach, and community involvement is crucial in developing successful interventions to improve migrants' mental health. However, I do acknowledge that this is too little effort, and suggest further research to implement a more dedicated strength-based approach.

Future research should shift the focus towards the resilience, strengths and coping mechanisms that enable migrants to navigate the challenges they encounter. This would allow researchers to identify protective factors and resources that empower migrants to overcome adversity and would foster a more holistic understanding of how to prevent the development of mental health problems. Research should acknowledge the agency and resilience that migrants exhibit in navigating their mental health journeys. The results of this research hold relevance beyond the context of migrant mental healthcare. Understanding the unique skills, strengths or support networks within migrant communities provide valuable insights that can enhance mental healthcare services not only for migrants but also for general and non-migrant populations.

5.3 Recommendations for policy and practice

This study has shed light on the diverse ways in how mental health is understood and how this influences the healthcare behaviour within the East-African migrant community. It has also offered valuable insights into the perspectives of healthcare professionals who can play a role in supporting and providing care to this population. By combining the insights from this dissertation with existing scientific literature, helpful suggestions for policy and practice can be drawn towards developing culturally sensitive and inclusive mental healthcare services.

In the articles, specific recommendations related to the respective subjects are discussed. Especially in the review article (article 3) extensive attention is given to policy recommendations with the description of successful strategies for the development of interventions focusing on improving mental health among migrants. In what follows, I synthesize the suggestions overarching all the articles into a comprehensive overview. To foster a culturally sensitive and inclusive healthcare system, I propose three key investments. Firstly, healthcare personnel should undergo training to become capable and

responsive when interacting with individuals from diverse migration backgrounds, ensuring they can provide appropriate care. Additionally, efforts should be made to enhance the diversity within the healthcare workforce to better reflect society and make migrants feel acknowledged and understood in their cultural identity. Secondly, adopting a holistic approach to the healthcare system is essential, which includes incorporating community-based initiatives to complement existing services. This integration can lead to more comprehensive care that addresses the specific needs of various communities, further promoting inclusivity. Thirdly, policy makers should focus on a societal approach to mental health problems among migrants, recognizing that these issues are influenced by broader external factors. Investments in domains such as housing and labour, as well as efforts to combat social exclusion, discrimination, and racism, can contribute significantly to better overall health outcomes for migrants.

5.3.1 Invest in culturally sensitive healthcare

Both participant groups in the studies point to the limited cultural sensitivity of the Belgian healthcare system. Migrant participants do not feel recognized in their explanatory model of mental health, professional participants denounce the lack of cultural sensitivity training and both groups criticize the lack of diversity in healthcare staff. Evidence proves that a culturally sensitive approach to psychopathology has the potential to improve mental health outcomes for people from diverse cultural backgrounds (Gone and Kirmayer 2010). Healthcare professionals who offer culturally sensitive care, are better equipped to provide equitable, effective, and culturally and linguistically appropriate healthcare to all people (Horvat et al. 2014). It involves awareness on cultural factors within the clinical encounter, and understanding and responding to the cultural and social contexts of patients. However, what exactly constitutes 'cultural sensitive care' is an ongoing discussion, and the often used term of 'cultural competence' is largely debated. Therefore, it is also important to acknowledge its potential pitfalls: acknowledging culture cannot be reduced to a technical skill that can be learned (Kleinman and Benson 2006). It risks essentializing culture to a static core set of beliefs while culture rather comprises multiple variables that affect different aspects of experiences (Kleinman and Benson 2006; Wendt and Gone 2012). Furthermore, cultural factors are not always central in a patient's case and their significance should first be explored. To counter these risks, a practitioner could use tools developed for this exploration, such as the Cultural Formulation Interview (Jarvis et al. 2020) or the Explanatory Models Approach (Kleinman and Benson 2006) – the latter being the theoretical foundation in this dissertation.

Exploring how explanatory models of mental health and illness impact people's experiences and influence diagnosis and treatment is essential (Chentsova-Dutton and Ryder 2020). This approach can help to capture the complexity and diversity of patients' experiences and to develop more patient-centred and culturally sensitive care (Kirmayer and Bhugra 2009). Exploring the explanatory models of

mental health among their patients, enables professionals to move between cultural perspectives (Bassey and Melluish 2013). This is not limited to mental healthcare professionals only, primary care professionals, for instance, are often the first point of contact for migrant populations within a healthcare system, and have thus an important role in providing culturally sensitive care (Kirmayer 2011). Healthcare professionals can enhance their cultural responsiveness by embracing a broad approach to culture and by being attentive to structural influences on social determinants of health, such as income and social status, social support networks, education and literacy, employment/working conditions, social environments, and physical environments (Kirmayer and Jarvis 2019). Rather than starting with specific groups or populations labelled as the "cultural other", this approach emphasizes the recognition of larger social and cultural values, collective identity, notions of citizenship and civil society next to individualized explanatory models. It is also important that the professional not only takes the explanatory model and cultural identity of the patient into account, but also is aware of his or her own explanatory model, professional role and applied model of care (Kirmayer and Jarvis 2019). This awareness can lead to more comprehensive and effective care delivery that addresses not only the individual's mental health concerns but also the broader contextual factors impacting their well-being.

Policy makers and healthcare organizations should also invest in diversifying the personnel in healthcare, representing the communities that constitute the society (Baskin et al. 2021). A healthcare workforce that is diverse can lead to improved outcomes, particularly through ethnic, culture and language commonalities (Simms 2013). For example, research has shown that patients are most satisfied when the professional shares their explanatory model of health (Gopalkrishnan 2018). Moreover, by embracing diversity and fostering an inclusive environment, healthcare systems can strengthen their position within the community and enhance their ability to deliver effective and culturally sensitive care. A diverse healthcare staff provides role models for young people in minority communities and can boost the pool of medically trained personnel (Simms 2013). It is important that this investment is ongoing and holds a culture sensitive approach in education and training that also draws on examples from different cultural groups, rather than investing in a ‘one-size-fits-all’ model (Gopalkrishnan and Babacan 2015; Hunt 2007). Because, also when the practitioner has the same cultural background, a cultural clash in thinking or ideology can occur (Gopalkrishnan and Babacan 2015).

5.3.2 Implementing a holistic healthcare approach

Although a culturally competent approach from individual healthcare professionals is crucial in achieving culturally sensitive (mental) healthcare, it is important to recognize that the responsibility does not solely rest on the individual (Horvat et al. 2014). My research results also point to the

importance of adopting a holistic healthcare approach, encompassing the social determinants of health influencing the mental health of migrants, their cultural background context and their (limited) access to healthcare. In my research it became clear that what is conceptualized as mental health among East-African migrants, differs from the dominant perception among healthcare professionals. A narrow focus solely on (individual) mental health is insufficient. Within the healthcare system itself, a better integration of mental and primary healthcare could help to overcome initial cultural distinctions regarding what is considered a mental health problem, as it are often general practitioners who are the first consulted (Giacco et al. 2014; Kirmayer 2011). However, as my PhD research highlighted, migrant participants mostly rely on community or religious support networks when seeking help. This underscores the importance of recognizing and valuing the role of these community services in the overall healthcare landscape (Marsella 2011; O'Mahony and Donnelly 2007; Phillimore et al. 2019). Civil society organizations often play a vital role in addressing gaps and shortcomings in mental healthcare provision, adding value to the overall system of care (Phillimore et al. 2019). As suggested by some of the participants in my research, a collaboration with cultural and religious organizations can be instrumental in this regard. By implementing a focus on social support and cultural healing practices, healthcare systems can foster better communication, understanding, and trust between healthcare providers and migrant communities (Fauk et al. 2022; Gone and Kirmayer 2010; Marsella 2011; O'Mahony and Donnelly 2007).

A collaborative, multifaceted approach between community organisations and healthcare institutions not only enhances the effectiveness of care and ensures its cultural appropriateness, but also addresses the unique needs and preferences of diverse migrant populations. Through community-based approaches in thoughtful outreach programs, a more inclusive and effective mental healthcare system for migrants can be created (Riza et al. 2020). Outreach programs are needed to meet the needs of the most vulnerable individuals who experience barriers to locate and use health services (Salami et al. 2019). Community healthcare workers, for instance, can bridge a gap between vulnerable (migrant) communities and the healthcare system. The integration of community health workers into national healthcare systems has demonstrated its potential to enhance service accessibility, mitigate health disparities, and enhance health outcomes (Mupara et al. 2022; Scott et al. 2018). Because the community health workers are trusted community members, they play a crucial role in bridging the gap between the healthcare system and underserved populations, fostering better healthcare delivery (Capotescu et al. 2022; Mupara et al. 2022). In addition, the involvement of community and religious leaders in mental healthcare programs can build trust and support to improve access to mental health services and facilitate effective mental healthcare practice (Fauk et al. 2022). Furthermore, community-based programs can be effective in addressing stigma prevalent in migrant communities (IOM 2021;

Salami et al. 2019). Community interventions, such as inclusive discussion groups aimed at stigma reduction, and targeted efforts within community settings, involving family members, healthcare professionals, and media channels relevant to these communities, hold significant potential for success in reducing stigma (Knifton et al. 2010).

5.3.3 Acting towards a non-detrimental societal context

While a culturally sensitive and holistic approach within the healthcare system can enhance better mental health outcomes, it is equally essential that prevention programs and policies target the root causes of mental health problems among migrants. The study participants emphasized the detrimental effects of the reception and integration system, which, at times, fosters social exclusion, discrimination, and racism among migrant populations. They highlight the extended and insecure waiting period during residency applications, the challenging search for suitable housing and employment, wherein they frequently encounter discriminatory practices. Also, within the healthcare system itself, discriminatory and racist practices can occur (Cénat 2020). These findings have been extensively documented in research literature (Giacco et al. 2014; Priebe et al. 2016; Voglino et al. 2022). Many studies in this field highlight the concept of 'society as a patient' (Marsella 2011), underscoring that the influence of the external health environment cannot be overlooked. Not all problems are solely within the individual (nor the cultural community), and a patient's well-being or lack thereof can result from external environmental impacts. Migrants and refugee populations in high-income countries may experience racism, discrimination, and marginalization. When professionals interpret these social problems as emotional or mental health problems within the individual migrant, they may increase the feeling of alienation and non-belonging among migrants (Sangaramoorthy and Carney 2021). Therefore, it is crucial to tackle the social determinants that contribute to the vulnerability of ethnic minorities and migrants to mental health issues (Nosè et al. 2017; Priebe et al. 2016). However, changing structural social determinants such as long waiting periods for residency applications or discrimination in the housing and labour market, might be difficult and requires structural policy changes. Policy makers must act upon the available research evidence, which illustrates the harmful socio-economic conditions in which the majority of migrants and ethnic minorities live.

To achieve this goal, a comprehensive and collaborative approach is necessary that engages governmental authorities with the capacity to address these detrimental structural across various sectors and policy domains beyond the healthcare system (Bradby et al. 2015; Turrini et al. 2017; Vostanis 2014; WHO 2022b). Political and institutional investments should be made in practical interventions, clear guidelines and policy approaches, as well as facilitating interdisciplinary work (Cénat 2020; Marsella 2011; Peñuela-O'Brien et al. 2022). This approach should extend beyond the boundaries

of healthcare settings, encompassing other sectors like social care, housing, and labour (Kim et al. 2021; Salami et al. 2017, 2019). By enabling the socio-economic integration of migrants and implementing enhanced integration strategies, there is the potential to improve the mental health of migrants while also fostering greater acceptance of diversity, thereby leading to a reduction in discrimination towards migrants (Priebe et al. 2016; Straiton, Aambø, and Johansen 2019). Policies and prevention programs that tackle social health determinants, social exclusion, discrimination, and racism can significantly contribute to improving mental health outcomes and promoting overall well-being within migrant communities. Again, engaging communities and stakeholders in the decision-making process is essential for successful implementation of such an intersectoral approach (O'Mahony and Donnelly 2007; Phillimore et al. 2019). This community involvement helps identify local priorities and ensures that policies are responsive to community needs.

5.4 Conclusion

This PhD-research is the first to explore the explanatory models of mental health among East-African migrants living in Belgium, and the perceptions of (mental) healthcare professionals. The research reveals that indeed, the understanding of mental health among East-African migrants significantly differs from the dominant diagnostic frameworks in the Global North. These differing views have important implications for the (mental) healthcare seeking behaviour of the migrant population included in this study, who claimed to search for help outside the conventional Belgian mental healthcare system. However, familiarity with the dominant explanatory model of mental health in Belgium influenced their attitudes toward accessing conventional mental health services. Healthcare professionals in Belgium who work with patients from sub-Saharan African (SSA) migrant backgrounds, observed disparities between the migrants' and their explanatory models. These differences sometimes created treatment difficulties. Professionals without a migration background, tried to resolve these difficulties by applying a 'culturally sensitive' approach, although the interpretation of such an approach differed between the professionals. Meanwhile, professionals with a similar migration background as their patients used their familiarity and insights in the explanatory models of their patients, which facilitated communication and treatment practices. Importantly, both participant groups highlighted the structural issues within the healthcare system, calling for a more comprehensive and culturally sensitive approach. Both professionals and migrants advocated for more culturally appropriate care, diverse healthcare personnel, cultural sensitivity training, and most importantly, involvement of cultural communities in the healthcare system. Additionally, both groups also highlighted the impact of external factors, such as the Belgian reception and integration system. Integration-related stressors were identified as drivers for mental health issues among migrants, particularly due to the complex and lengthy reception and integration system in Belgium which can fuel social exclusion.

From the dissertation findings, a foundation could be laid for improving the organization and implementation for mental healthcare for migrants in Belgium. The recommendations for policy and practice at the end of this dissertation, based on both the findings as well as scientific literature, could serve as a guiding framework. Furthermore, through the application of the strategies highlighted in the scoping review within this dissertation, namely, establishing a theoretical foundation, incorporating cultural adaptations, and adopting participatory methods, can create the way for the development of comprehensive and effective mental health interventions.

References

Abdullah, T and TL Brown. 2011. “Mental Illness Stigma and Ethnocultural Beliefs, Values, and Norms: An Integrative Review.” Clinical Psychology Review 31(6):934–48. http://dx.doi.org/10.1016/j.cpr.2011.05.003

Abubakar, I, RW. Aldridge, D Devakumar, M Orcutt, R Burns, ML Barreto, P Dhavan, FM Fouad, N Groce, Y Guo, S Hargreaves, M Knipper, J Miranda, N Madise, B Kumar, D Mosca, T McGovern, L Rubenstein, P Sammonds, SM Sawyer, K Sheikh, S Tollman, P Spiegel, C Zimmerman, M Abbas, E Acer, A Ahmad, S Abimbola, K Blanchet, P Bocquier, F Samuels, O Byrne, S Haerizadeh, R Issa, M Collinson, C Ginsburg, I Kelman, A McAlpine, N Pocock, B Olshansky, D Ramos, M White, and S Zhou. 2018. “The UCL–Lancet Commission on Migration and Health: The Health of a World on the Move.” The Lancet 392(10164):2606–54.

Acheson D. 1998. Independent Inquiry into Inequalities in Health: A Review of Health Inequalities in England and Recommendations on How to Reduce Them. London: Department of Health and Social Care.

Adam, Ilke. 2013. “Immigrant Integration Policies of the Belgian Regions: Sub-state Nationalism and Policy Divergence after Devolution.” Regional & Federal Studies 23 (5): 547–569. doi:10. 1080/13597566.2013.789024.

Afuwape SA, Craig TKJ, Harris T, Clarke M, Flood A, Olajide D, Cole E, Leese M, McCrone P and Thornicroft G (2010) The Cares of Life Project (CoLP): An Exploratory Randomised Controlled Trial of a Community-Based Intervention for Black People with Common Mental Disorder. Journal of Affective Disorders 127 (1–3): 370–74. https://doi.org/10.1016/j.jad.2010.05.017.

Aga, N, S Rowaert, and W Vanderplasschen. 2017. “Historiek En Organisatie van de Geestelijke Gezondheidszorg in Vlaanderen.” Orthopedagogische Werkvelden in Beweging: Recente Revoluties En Veranderingen in Vlaanderen (October):274.

Aggarwal, NK. 2021. “The Cross-Cultural Assessment of Migrants.” in Oxford Textbook of Migrant Psychiatry, edited by D. Bhugra. Oxford: Oxford University Press.

Agu, J.C., Hee-Jeon, Y., Steel, A. et al. 2019. A Systematic Review of Traditional, Complementary and Alternative Medicine Use Amongst Ethnic Minority Populations: A Focus Upon Prevalence, Drivers, Integrative Use, Health Outcomes, Referrals and Use of Information Sources. J Immigrant Minority Health 21, 1137–1156. https://doi.org/10.1007/s10903-018-0832-4

Agyemang, C, R Bhopal, and M Bruijnzeels. 2005. “Negro, Black, Black African, African Caribbean, African American or What? Labelling African Origin Populations in the Health Arena in the 21st Century.” Journal of Epidemiology and Community Health 59(12):1014–18.

Agyemang, C. 2019. Comfy zone hypotheses in migrant health research: time for a paradigm shift. Public health, 172, 108–115. https://doi.org/10.1016/j.puhe.2019.03.025

Ahmadinia, Hamed, K Eriksson-Backa, and S Nikou. 2022. “Health-Seeking Behaviours of Immigrants, Asylum Seekers and Refugees in Europe: A Systematic Review of Peer-Reviewed Articles.” Journal of Documentation 78(7):18–41.

Aidoo, M. 2001. “The Explanatory Models of Mental Health amongst Low-Income Women and Health Care Practitioners in Lusaka, Zambia.” Health Policy and Planning 16(2):206–13.

Alba, R. D., & Nee, V. 2003. Remaking the American mainstream: Assimilation and contemporary immigration. Harvard University Press.

Alencar, A., & Tsagkroni, V. 2019. Prospects of Refugee Integration in the Netherlands: Social Capital, Information Practices and Digital Media. Media and Communication. https://doi.org/10.17645/MAC.V7I2.1955.

American Psychiatric Association. 2013. Diagnostic and Statistical Manual of Mental Disorders. edited by F. Edition. Arlington, VA: American Psychiatric Publishing.

Amunga, CN. 2020. “The Impact of Cultural Beliefs on Mental Health: A World View From Selected Communities in Western Kenya.” East African Journal of Traditions, Culture and Religion 2(1):34–38.

Amuyunzu-Nyamongo, M. 2013. “The Social and Cultural Aspects of Mental Health in African Societies.” Commonwealth Health Partnerships 59–63.

Anthony, E. 2015. “Pathways , Barriers and Facilitators to Psychological Therapy for Members of Black African Communities in the UK.” University College London.

Antić, A. 2021. “Transcultural Psychiatry: Cultural Difference, Universalism and Social Psychiatry in the Age of Decolonisation.” Culture, Medicine and Psychiatry 45(3):359–84.

Apers, H, C Nöstlinger, and L Van Praag. 2023. “Explanatory Models of (Mental) Health Among Sub-Saharan African Migrants in Belgium: A Qualitative Study of Healthcare Professionals’ Perceptions and Practices.” Culture, Medicine and Psychiatry (0123456789).

Apers, H, L Richter and L Van Praag. 2021. Introduction on the Use of Co-Creative Research Methods in Migration Studies. In Co-Creation in Migration Studies: The Use of Co-Creative Methods to Study Migrant Integration across European Societies (ed. L Van Praag), 17-46. Leuven: University Press Leuven (CeMIS Series).

Apers, H, L Van Praag, C Nöstlinger, and C Agyemang. 2023. “Interventions to Improve the Mental Health or Mental Well-Being of Migrants and Ethnic Minority Groups in Europe: A Scoping Review.” Global Mental Health 10(e23):1–25.

Arafat, NM. 2016. “Language, Culture and Mental Health: A Study Exploring the Role of the Transcultural Mental Health Worker in Sheffield, UK.” International Journal of Culture and Mental Health 9(1):71–95. https://doi.org/10.1080/17542863.2015.1112419.

Arksey, H and L O’Malley. 2005. “Scoping Studies: Towards a Methodological Framework.” International Journal of Social Research Methodology 8(1):19–32. https://doi.org/10.1080/1364557032000119616.

Arrey, AE, J Bilsen, P Lacor, and R Deschepper. 2016. “Spirituality/Religiosity: A cultural and Psychological Resource among Sub-Saharan African Migrant Women with HIV/AIDS in Belgium.” PLoS ONE 11(7):1–22.

Arundell, LL, P Barnett, JEJ Buckman, R Saunders and S Pilling. 2021. The Effectiveness of Adapted Psychological Interventions for People from Ethnic Minority Groups: A Systematic Review and

Conceptual Typology. Clinical Psychology Review 88 (June): 102063. https://doi.org/10.1016/j.cpr.2021.102063.

Atilola, Olayinka. 2016. "Mental Health Service Utilization in Sub-Saharan Africa: Is Public Mental Health Literacy the Problem? Setting the Perspectives Right." Global Health Promotion 23 (2): 30–37. https://doi.org/10.1177/1757975914567179.

Attygalle, L. 2020. Understanding Community-Led Approaches To Community Change [webpage]. https://protection.interaction.org/wp-content/uploads/2022/01/2020-PAPER-_-Understanding-Community-Led-Approaches.pdf.

Ayalon, L, & J Alvidrez. 2007. The experience of black consumers in the mental health system - Identifying barriers to and facilitators of mental health treatment using the consumers' perspective. Issues in Mental Health Nursing, 28(12), 1323–1340. https://doi.org/10.1080/01612840701651454

Ayinde, OO and O Gureje. 2021. "Cross-Cultural Applicability of ICD-11 and DSM-5 Personality Disorder." Current Opinion in Psychiatry 34(1).

Babalola E, Noel P, White R. 2017. The biopsychosocial approach and global mental health: Synergies and opportunities. Indian J Soc Psychiatry;33:291-6.

Babatunde-Sowole, OO, M DiGiacomo, T Power, PM Davidson, and D Jackson. 2020. "Resilience of African Migrant Women: Implications for Mental Health Practice." International Journal of Mental Health Nursing 29(1):92–101.

Bailey, J. 2014. "The Issues Affecting Mental Health Nursing in Uganda." African Journal of Psychiatry (South Africa) 17(6).

Barnett, P, E Mackay, H Matthews, R Gate, H Greenwood, K Ariyo, K Bhui, K Halvorsrud, S Pilling, and S Smith. 2019. "Ethnic Variations in Compulsory Detention under the Mental Health Act: A Systematic Review and Meta-Analysis of International Data." The Lancet Psychiatry 6(4):305–17.

Bartholomew, LK, CM Markam, RAC Ruiter, M Fernández, G Kok and GS Parcel. 2016. Planning Health Promotion Programs - An Intervention Mapping Approach. Second Ed. San Francisco: Jossey-Bass.

Baskin, C, G Zijlstra, M McGrath, C Lee, FH Duncan, EJ Oliver, D Osborn, J Dykxhoorn, EFS Kaner, L LaFortune, KR Walters, J Kirkbride and S Gnani. 2021. Community-Centred Interventions for Improving Public Mental Health among Adults from Ethnic Minority Populations in the UK: A Scoping Review. BMJ Open 11 (4), 1–11. https://doi.org/10.1136/bmjopen-2020-041102.

Bassey, S, and S Melluish. 2013. "Cultural Competency for Mental Health Practitioners: A Selective Narrative Review." Counselling Psychology Quarterly 26 (2): 151–73. https://doi.org/10.1080/09515070.2013.792995.

Berry, JW. 1997. "Immigration, Acculturation, and Adaptation." Applied Psychology 46(1):5–34. https://doi.org/10.1111/j.1464-0597.1997.tb01087.x

Berry, JW. 2001. "A Psychology of Immigration." Journal of Social Issues 57 (3): 615–631.doi:10.1111/0022-4537.00231.

Berry, JW., JS. Phinney, DL. Sam, and P Vedder. 2006. "Immigrant Youth: Acculturation, Identity, and Adaptation." Applied Psychology 55 (3): 303–332. doi:10.1111/j. 1464-0597.2006.00256.x.

Berry, JW., K Uichol, S. Power, M Young, and M Bujaki. 1989. “Acculturation Attitudes in Plural Societies.” Applied Psychology: An International Review 3 (2): 185–206. doi:10.1111/j.1464-0597.1989.tb01208.x.

Bhopal, R and L Donaldson. 1998. “White, European, Western, Caucasian, or What? Inappropriate Labeling in Research on Race, Ethnicity, and Health.” American Journal of Public Health 88(9):1303–7.

Bhugra D. 2004. Migration and Mental Health. Acta Psychiatra Scandinavica, 109, 243–58.

Bhugra, D, Cn Watson, and RWijesuriya. 2021. “Culture and Mental Illnesses.” International Review of Psychiatry 33(1–2):1–2.

Bhui, K and D Bhugra. 2002. “Explanatory Models for Mental Distress: Implications for Clinical Practice and Research.” British Journal of Psychiatry 181(July):6–7. https://doi.org/10.1192/bjp.181.1.6.

Bhui, K, and D Bhugra. 2004. “Communication with Patients from Other Cultures: The Place of Explanatory Models.” Advances in Psychiatric Treatment 10 (6), 474–78. https://doi.org/10.1192/apt.10.6.474.

Bhui, K, K Rüdell, and S Priebe. 2006. “Assessing Explanatory Models for Common Mental Disorders.” The Journal of Clinical Psychiatry 67(6):964–71.

Blackmore, R, JA Boyle, M Fazel, S Ranasinha, KM Gray, G Fitzgerald, M Misso, and M Gibson-Helm. 2020. “The Prevalence of Mental Illness in Refugees and Asylum Seekers: A Systematic Review and Meta-Analysis.” PLoS Medicine 17(9):1–24. https://doi.org/10.1371/journal.pmed.1003337

Borrell, C, L Palencia, X Bartoll, U Ikram, and D Malmusi. 2015. “Perceived Discrimination and Health among Immigrants in Europe According to National Integration Policies.” International Journal of Environmental Research and Public Health 12(9):10687–99. https://doi.org/10.3390/ijerph120910687.

Boukpessi, TB. 2021. “Why Are African Immigrants in Canada Reluctant to Use Mental Health Services ? A Systematic Inventory of Reasons.” 1–16.

Boyd, KM. 2000. “Disease, Illness, Sickness, Health, Healing and Wholeness: Exploring Some Elusive Concepts.” Medical Humanities 26(1):9–17.

Bracke, P. 2016. “Comparative Mental Health Sociology : In between Psychiatric Epidemiology and Theories of Societal Discontent.” in Future challenges for Health and Healthcare in Europe, edited by G. Giarelli, B. Jacobsen, M. Nielsen, and G. Reinbacher. Aaiborg University Press.

Bracken, P, J Giller & D Summerfield. 1995. Psychological responses to war and atrocity: the limitation of current concepts. Soc. Sci. Med, 40(8), 1073–1082. https://doi.org/https://doi.org/10.1016/0277-9536(94)00181-R

Bracken, P, P Thomas, S Timimi, E Asen, G Behr, C Beuster, S Bhunnoo, I Browne, N Chhina, D Double, S Downer, C Evans, S Fernando, MR Garland, W Hopkins, R Huws, B Johnson, B Martindale, H Middleton, D Moldavsky, J Moncrieff, S Mullins, J Nelki, M Pizzo, J Rodger, M Smyth, D Summerfield, J Wallace, and D Yeomans. 2012. “Psychiatry beyond the Current Paradigm.” British Journal of Psychiatry 201(6):430–34.

Bracken, PJ, JE Giller, and D Summerfield. 1995. “Psychological Responses to War and Atrocity: The Limitation of Current Concepts.” Soc. Sci. Med 40(8):1073–82.

Bradby, H, R Humphris, D Newall, and J Phillimore. 2015. Public Health Aspects of Migrant Health: A Review of the Evidence on Health Status for Refugees and Asylum Seekers in the European Region. Copenhagen.

Braun, V. and V. Clarke. 2006. "Using Thematic Analysis in Psychology." Qualitative Research in Psychology, 3(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Bredström, A. 2019. "Culture and Context in Mental Health Diagnosing: Scrutinizing the DSM-5 Revision." Journal of Medical Humanities 40(3):347–63.

Brittanica. 2023. "'Horn of Africa.'" Encyclopedia Britannica. Retrieved October 2, 2023 (https://www.britannica.com/place/Horn-of-Africa).

Byrne, D. 2022. "A Worked Example of Braun and Clarke's Approach to Reflexive Thematic Analysis." Quality and Quantity 56(3):1391–1412. https://doi.org/10.1007/s11135-021-01182-y

Callan, A and R Littlewood. 1998. "Patient Satisfaction: Ethnic Origin or Explanatory Model?" The International Journal of Social Psychiatry 44(1):1–11.

Campbell, KA, E Orr, P Durepos, L Nguyen, L Li, C Whitmore, P Gehrke, L Graham, and SM Jack. 2021. "Reflexive Thematic Analysis for Applied Qualitative Health Research." Qualitative Report 26(6):2011–28. https://doi.org/10.46743/2160-3715/2021.5010

Campbell, MR, KD Mann, S Moffatt, M Dave, and MS Pearce. 2018. "Social Determinants of Emotional Well-Being in New Refugees in the UK." Public Health 164(0):72–81.

Capotescu, C, T Chodon, J Chu, E Cohn, G Eyal, R Goyal, O Ige, J LaViolette, S Mallik, L Mae Phillips, P Spencer, and DL Tomson. 2022. "Community Health Workers' Critical Role in Trust Building Between the Medical System and Communities of Color." American Journal of Managed Care 28(10):497–99.

Carling, J, MB Erdal, and R Ezzati. 2014. "Beyond the Insider–Outsider Divide in Migration Research." Migration Studies 2(1):36–54.

Carta MG, M Bernal, MC Hardoy, JM Haro-Abad, and the "Report on the Mental Health in Europe" working group. 2005. Migration and Mental Health in Europe (The State of the Mental Health in Europe Working Group: Appendix I). Clinical Practice and Epidemiology in Mental Health 1 1–16. https://doi.org/10.1186/1745-0179-1-13.

Castelli, F. 2018. "Drivers of Migration: Why Do People Move?" Journal of Travel Medicine 25(1):1–7.

Cénat, JM. 2020. "How to Provide Anti-Racist Mental Health Care." The Lancet Psychiatry 7(11):929–31. https://doi.org/10.1016/S2215-0366(20)30309-6

Centola, D, D Guilbeault, U Sarkar, E Khoong, and J Zhang. 2021. "The Reduction of Race and Gender Bias in Clinical Treatment Recommendations Using Clinician Peer Networks in an Experimental Setting." Nature Communications 12(1):1–10.

Centrum voor gelijkheid van kansen en voor racismebestrijding. 2011. Discriminatie van Personen van Sub-Saharaanse Afkomst: Een Overzicht van Stereotypen.

Ceuterick, M, P Bracke, T Van Canegem, and V Buffel. 2020. "Assessing Provider Bias in General Practitioners' Assessment and Referral of Depressive Patients with Different Migration Backgrounds:

Methodological Insights on the Use of a Video-Vignette Study." Community Mental Health Journal 56(8):1457–72.

Chapin Metz, H. 1992. Somalia: A Country Study. Washington: U.S. Library of Congress. http://countrystudies.us/somalia/34.htm.

Chaudhry N, W Waheed, N Husain, S Bhatti and F Creed. 2009. Development and Pilot Testing of a Social Intervention for Depressed Women of Pakistani Family Origin in the UK. Journal of Mental Health 18 (6), 504–9. https://doi.org/10.3109/09638230902968209.

Chentsova-Dutton, YE and AG Ryder. 2020. "Cultural Models of Normalcy and Deviancy." Asian Journal of Social Psychology 23(2):187–204.

Choudhry, FR, V Mani, LC Ming, and TM Khan. 2016. "Beliefs and Perception about Mental Health Issues: A Meta-Synthesis." Neuropsychiatric Disease and Treatment 12:2807–18. https://doi.org/10.2147/NDT.S111543

Christodoulou V, L Fortune, G Arslan and G Koc. 2018. Turkish-Speaking Service-User Experience of Guided Self-Help in an Improving Access to Psychological Therapies Service: Using Discovery Interviews to Improve Services. Qualitative Report 23 (9), 2205–21. https://doi.org/10.46743/2160-3715/2018.2324.

Ciaramella, M, N Monacelli, and L Concetta Eugenia Cocimano. 2022. "Promotion of Resilience in Migrants: A Systematic Review of Study and Psychosocial Intervention." Journal of Immigrant and Minority Health 24(5):1328–44.

Claeys, A, S Berdai-Chaouni, S Tricas-Sauras, and L De Donder. 2022. "Barriers and Facilitators in Providing Care for Patients with a Migration Background." Journal of Clinical Nursing (July):1–14.

Colucci, E, H Minas, J Szwarc, G Paxton, and C Guerra. 2012. "Barriers to and Facilitators of Utilisation of Mental Health Services by Young People of Refugee Background. A Collaborative Project between Foundation House, Centre for International Mental Health, the Royal Children's Hospital and the Centre for Multicu." (January):43.

Constantine, MG., LM Myers, M Kindaichi, and JL Moore. 2004. "Exploring Indigenous Mental Health Practices : The Roles of Healers ..." Counseling and Values 48(January):110–25.

Coope, J, A Barrett, B Brown, M Crossley, R Raghavan, and M Sivakami. 2020. "Resilience, Mental Health and Urban Migrants: A Narrative Review." International Journal of Migration, Health and Social Care 16(2):137–59.

Corrigan, PW, BG Druss, and DA Perlick. 2014. "The Impact of Mental Illness Stigma on Seeking and Participating in Mental Health Care." Psychological Science in the Public Interest, Supplement 15(2):37–70. https://doi.org/10.1177/1529100614531398

Coune, I, M Dauvrin, and H Verrept. 2020. Ethealth Rapport 2020 - Naar Een Gelijkwaardige Gezondheidszorg Voor Migranten En Etnische Minderheden.

Cox, N and L Webb. 2015. "Poles Apart: Does the Export of Mental Health Expertise from the Global North to the Global South Represent a Neutral Relocation of Knowledge and Practice?" Sociology of Health and Illness 37(5):683–97.

D'Souza L and J Garcia. 2004. Improving Services for Disadvantaged Childbearing Women. Child: Care, Health and Development 30 (6), 599–611. https://doi.org/10.1111/j.1365-2214.2004.00471.x.

Dahlgren G and M Whitehead. 1991. Policies and strategies to promote social equity in health. Stockholm: Stockholm Institute for Further Studies.

Dauvrin, M, I Derluyn, I Coune, H Verrept, and V Lorant. 2012. "Towards Fair Health Policies for Migrants and Ethnic Minorities : The Case-Study of ETHEALTH in Belgium." BMC Public Health 12(726).

Davies, A, A Basten, and C Frattini. 2009. "Migration: A Social Determinant of the Health of Migrants." Eurohealth 16(1):10–12.

de Freitas C and G Martin. 2015. Inclusive Public Participation in Health: Policy, Practice and Theoretical Contributions to Promote the Involvement of Marginalised Groups in Healthcare. Social Science and Medicine 135, 31–39. https://doi.org/10.1016/j.socscimed.2015.04.019.

De Silva MJ, E Breuer, L Lee, L Asher, N Chowdhary, C Lund and V Patel. 2014. Theory of Change: A Theory-Driven Approach to Enhance the Medical Research Council's Framework for Complex Interventions. Trials 15 (1), 1–13.

Degnan A, S Baker, D Edge, W Nottidge, M Noke, CJ Press, N Husain, S Rathod and RJ Drake. 2018. The Nature and Efficacy of Culturally-Adapted Psychosocial Interventions for Schizophrenia: A Systematic Review and Meta-Analysis. Psychological Medicine 48 (5), 714–27. https://doi.org/10.1017/S0033291717002264.

Dein, S. 2003. "Against Belief: The Usefulness of Explanatory Model Research in Medical Anthropology." Social Theory and Health 1(2):149–62.

Delara, M. 2016. "Social Determinants of Immigrant Women's Mental Health." Advances in Public Health.

Delaruelle, K, V Buffel, T Van Canegem, P Bracke, and M Ceuterick. 2022. "Mind the Gate: General Practitioner's Attitudes Towards Depressed Patients with Diverse Migration Backgrounds." Community Mental Health Journal 58(3):499–511.

Demart, S and L Bodeux. 2013. "Postcolonial Stakes of Congolese (DRC) Political Space: 50 Years after Independence." African Diaspora 6(1):72–96.

Demart, S, B Schoumaker, M Godin, and I Adam. 2017. Burgers Met Afrikaanse Roots: Een Portret van Congolese, Rwandese En Burundese Belgen. Brussels

Denzin, NK, and YS Lincoln. 2011. The SAGE Handbook of Qualitative Research. London: SAGE Publications Ltd.

De Meyer, E., Van Damme, P., de la Peña, E. et al. 2022. 'A disease like any other' traditional, complementary and alternative medicine use and perspectives in the context of COVID-19 among the Congolese community in Belgium. J Ethnobiology Ethnomedicine 18, 29. https://doi.org/10.1186/s13002-022-00530-y

Deriu V, MR Moro and L Benoit. 2018. Early Intervention for Everyone? A Review of Cross-Cultural Issues and Their Treatment in Ultra-High-Risk (UHR) Cohorts. Early Intervention in Psychiatry 12 (5): 796–810. https://doi.org/10.1111/eip.12671.

Derluyn, I, C Mels, and E Broekaert. 2009. “Mental Health Problems in Separated Refugee Adolescents.” Journal of Adolescent Health 44(3):291–97.

Derluyn, Ilse, E Broekaert, and G Schuyten. 2008. “Emotional and Behavioural Problems in Migrant Adolescents in Belgium.” European Child and Adolescent Psychiatry 17(1):54–62.

Derr, AS. 2016. “Mental Health Service Use among Immigrants in the United States: A Systematic Review.” Psychiatric Services 67(3):265–74. https://doi.org/10.1176/appi.ps.201500004

Desai, MU, N Paranamana, M Restrepo-Toro, M O’Connell, L Davidson, and V Stanhope. 2021. “Implicit Organizational Bias: Mental Health Treatment Culture and Norms as Barriers to Engaging with Diversity.” American Psychologist 76(1):78–90. https://doi.org/10.1037/amp0000621.Implicit

Dhadda, A and G Greene. 2018. “The Healthy Migrant Effect for Mental Health in England: Propensity-Score Matched Analysis Using the EMPIRIC Survey.” Journal of Immigrant and Minority Health 20(4):799–808.

Dinos, S, M Ascoli, JA Owiti, and K Bhui. 2017. “Assessing Explanatory Models and Health Beliefs: An Essential but Overlooked Competency for Clinicians.” BJPsych Advances 23(2):106–14. https://doi.org/10.1192/apt.bp.114.013680

Doki, S., Sasahara, S. & Matsuzaki, I. 2018. Stress of working abroad: a systematic review. Int Arch Occup Environ Health 91, 767–784. https://doi.org/10.1007/s00420-018-1333-4

Dowrick, C, P Bower, C Chew-Graham, K Lovell, S Edwards, J Lamb, K Bristow, M Gabbay, H Burroughs, S Beatty, W Waheed, M Hann and L Gask. 2016. Evaluating a Complex Model Designed to Increase Access to High Quality Primary Mental Health Care for Under-Served Groups: A Multi-Method Study. BMC Health Services Research 16 (1), 1–10. https://doi.org/10.1186/s12913-016-1298-5.

Dubus, N. 2022. “Resiliency with Forced Migrants: A Qualitative Study of Providers and Forced Migrants through a Resilience Perspective.” Behavioral Sciences 12(2). https://doi.org/10.3390/bs12020027.

Duveau, C, C Wets, K Delaruelle, S Demoulin, M Dauvrin, B Lepièce, M Ceuterick, S De Maesschalck, P Bracke, and V Lorant. 2023. “Unintentional Discrimination Against Patients with a Migration Background by General Practitioners in Mental Health Management: An Experimental Study.” Administration and Policy in Mental Health and Mental Health Services Research 50(3):450–60.

East African Community. 2023. “East African Community.” Retrieved October 2, 2023 (https://www.eac.int/).

Edge D and P Grey. 2018. “An Assets-Based Approach to Co-Producing a Culturally Adapted Family Intervention (CAFI) with African Caribbeans Diagnosed with Schizophrenia and Their Families.” Ethnicity and Disease 28, 485–92. https://doi.org/10.18865/ed.28.S2.485.

Edge D, A Degnan, S Cotterill, K Berry, J Baker, R Drake and K Abel. 2018. “Culturally Adapted Family Intervention (CaFI) for African-Caribbean People Diagnosed with Schizophrenia and Their Families: A Mixed-Methods Feasibility Study of Development, Implementation and Acceptability.” Health Services and Delivery Research 6 (32), 1–316. https://doi.org/10.3310/hsdr06320.

Egbe, CO, C Brooke-Sumner, T Kathree, O Selohilwe, G Thornicroft, and I Petersen. 2014. “Psychiatric Stigma and Discrimination in South Africa: Perspectives from Key Stakeholders.” BMC Psychiatry 14(1):1–14.

Ekeberg KA and DS Abebe. 2021. “Mental disorders among young adults of immigrant background: a nationwide register study in Norway.” Social psychiatry and psychiatric epidemiology, 56(6), 953–962. https://doi.org/10.1007/s00127-020-01980-z

Elshahat, S, T Moffat, and KB Newbold. 2021. “Understanding the Healthy Immigrant Effect in the Context of Mental Health Challenges: A Systematic Critical Review.” Journal of Immigrant and Minority Health.

Engel, GL. 1977. “The Need for a New Medical Model: A Challenge for Biomedicine.” Science (New York, N.Y.) 196(4286):129–36.

Erel U, K Murji and Z Nahaboo. 2016. “Understanding the contemporary race–migration nexus.” Ethnic and Racial Studies 39 (8), 1339-1360.

Eriksen MB and TF Frandsen. 2018. “The Impact of PICO as a Search Strategy Tool on Literature Search Quality: A Systematic Review.” Journal of the Medical Library Association 106 (4), 420–31. https://doi.org/10.5195/jmla.2018.345.

Essien, B and M Kumi Asamoah. 2020. “Reviewing the Common Barriers to the Mental Healthcare Delivery in Africa.” Journal of Religion and Health 59(5):2531–55.

European Migration Network. 2022. Mapping of Mental Health Policies for Third-Country National Migrants - EMN Inform. Brussels.

Eylem O, A van Straten, L de Wit, S Rathod, K Bhui and AJHM Kerkhof. 2021. “Reducing Suicidal Ideation among Turkish Migrants in the Netherlands and in the UK: The Feasibility of a Randomised Controlled Trial of a Guided Online Intervention.” Pilot and Feasibility Studies 7 (1), 1–18. https://doi.org/10.1186/s40814-021-00772-9.

Fauk, NK, A Ziersch, H Gesesew, P Ward, E Green, E Oudih, R Tahir, and L Mwanri. 2021. “Migrants and Service Providers’ Perspectives of Barriers to Accessing Mental Health Services in South Australia: A Case of African Migrants with a Refugee Background in South Australia.” International Journal of Environmental Research and Public Health 18(17):1–21.

Fauk, NK, A Ziersch, H Gesesew, PR Ward, and L Mwanri. 2022. “Strategies to Improve Access to Mental Health Services: Perspectives of African Migrants and Service Providers in South Australia.” SSM - Mental Health 2(November 2021):100058.

Favell, A. 2001. Integration policy and integration research in Europe: a review and critique. Citizenship today: global perspectives and practices, 349, 351-352. doi:10.2307/J.CTT6WPKC2.18.

Fazel M, J Wheeler and J Danesh. 2005. Prevalence of serious mental disorder in 7000 refugees resettled in western countries: a systematic review. Lancet (London, England), 365 (9467), 1309–1314. https://doi.org/10.1016/S0140-6736(05)61027-6

Fernando, S. 2002. Mental Health, Race and Culture. Edited by Jo Campling. Second Edi. Houndmills and New York: Palgrave.

Fischer, R and YH Poortinga. 2018. “Addressing Methodological Challenges in Culture-Comparative Research.” Journal of Cross-Cultural Psychology 49(5):691–712.

Fjær, E.L., Landet, E.R., McNamara, C.L. et al. 2020. The use of complementary and alternative medicine (CAM) in Europe. BMC Complement Med Ther 20, 108. https://doi.org/10.1186/s12906-020-02903-w

Foo, SQ, WW Tam, CS Ho, BX Tran, LH Nguyen, RS McIntyre, and RC Ho. 2018. “Prevalence of Depression among Migrants: A Systematic Review and Meta-Analysis.” International Journal of Environmental Research and Public Health 15(9). https://doi.org/10.3390/ijerph15091986

Galderisi, S, A Heinz, M Kastrup, J Beezhold, and N Sartorius. 2015. “Toward a New Definition of Mental Health.” World Psychiatry 14(2):231–33.

Gatarayiha, F, F Baro, MO Wagenfeld, and R Stockman. 1991. “The Development of Mental Health Services in Sub-Saharan Africa: The Case of Rwanda. Special Issue: Mental Health Services: An International Perspective.” Journal of Sociology & Social Welfare 18(2):25–40.

Gater R, W Waheed, N Husain, B Tomenson, S Aseem and F Creed. 2010. Social Intervention for British Pakistani Women with Depression: Randomised Controlled Trial. British Journal of Psychiatry 197 (3): 227–33. https://doi.org/10.1192/bjp.bp.109.066845.

Gerard, S, P Adriaens, A Bazan, P Bracke, M Camelyn, I Devich, JL Feys, B Froyen, O Lemiere, D Nieman, H Roeyers, S Vanheule, J van Os, J Vanderbergen, and H Lecock. 2019. “DSM (5): The Use and Status of Diagnosis and Classification of Mental Health Problems.” Advisory Report Of The Superior Health Council No. 9360 (June):1–33.

Gerkens, S and S Merkur. 2020. “Belgium: Health System Review.” Health Systems in Transition 22(5):i–237.

Ghane, S, AM Kolk, and PMG Emmelkamp. 2010. “Assessment of Explanatory Models of Mental Illness: Effects of Patient and Interviewer Characteristics.” Social Psychiatry and Psychiatric Epidemiology 45(2):175–82.

Giacco, D, A Matanov, & S Priebe. 2014. “Providing mental healthcare to immigrants: Current challenges and new strategies.” Current Opinion in Psychiatry, 27(4), 282–288. https://doi.org/10.1097/YCO.0000000000000065

Giordano, C. 2014. Migrants in Translation. Caring and the Logics of Difference in Contemporary Italy. Oakland, California: University of California Press.

Glanz K, BK Rimer and K Viswanath (eds). 2008. Health behavior and health education: theory, research, and practice. John Wiley & Sons.

Goffman, Ervin. 1963. Stigma. Notes on the Management of Spoiled Identity. Englewoord Cliffs, NJ: Prentice-Hall.

Gone, JP and LJ Kirmayer. 2010. “On the Wisdom of Considering Culture and Context in Psychopathology.” Pp. 72–96 in Contemporary Directions in Psychopathology: Scientific Foundations of the DSM-V and ICD-1, edited by T. Millon, R. F. Krueger, and E. Simonsen. New York: Guilford Press.

Goodman, RD, CK Vesely, B Letiecq, and CL Cleaveland. 2017. “Trauma and Resilience Among Refugee and Undocumented Immigrant Women.” Journal of Counseling and Development 95(3):309–21.

Gopalkrishnan, N and H Babacan. 2015. “Cultural Diversity and Mental Health.” Australasian Psychiatry 23(6_suppl):6–8. https://doi.org/10.1177/1039856215609769

Gopalkrishnan, N. 2018. ‘Cultural Diversity and Mental Health: Considerations for Policy and Practice’. Frontiers in Public Health 6, 179. https://doi.org/10.3389/fpubh.2018.00179

Graetz, V, B Rechel, W Groot, M Norredam, and M Pavlova. 2017. “Utilization of Health Care Services by Migrants in Europe - A Systematic Literature Review.” British Medical Bulletin 121(1):5–18. https://doi.org/10.1093/bmb/ldw057

Grégoire, N. 2010. “Identity Politics, Social Movement and the State: ‘Pan-African’ Associations and the Making of an ‘African Community’ in Belgium.” African Diaspora 3(1):160–82.

Gritti, P. 2017. “The Bio-Psycho-Social Model Forty Years Later : A Critical Review.” Journal of Psychosocial Systems 1(1):36–41.

Grupp, F, MR Moro, UM Nater, SM Skandrani, and R Mewes. 2018. “‘It’s That Route That Makes Us Sick’: Exploring Lay Beliefs About Causes of Post-Traumatic Stress Disorder Among Sub-Saharan African Asylum Seekers in Germany.” Frontiers in Psychiatry 9(November):1–14. https://doi.org/10.3389/fpsyt.2018.00628

Haas, BM. 2020. “‘Asylum Is the Most Powerful Medicine’: Navigating Therapeutic Interventions in Limbo.” Culture, Medicine and Psychiatry. https://doi.org/10.1007/s11013-020-09681-7.

Hack-Polay, D. 2020. Global South expatriates, homesickness and adjustment approaches. Public Health Rev 41, 11. https://doi.org/10.1186/s40985-020-00122-9

Han, CS and JL Oliffe. 2016. “Photovoice in Mental Illness Research: A Review and Recommendations.” Health (United Kingdom) 20(2):110–26.

Haro JM, JL Ayuso-mateos, I Bitter, J Demotes-Mainard, M Leboyer, SW Lewis, D Linszen, et al. 2014. ROAMER: Roadmap for Mental Health Research in Europe. International Journal of Methods in Psychiatric Research Jan. 23 (S (1–4).

Haroz, EE, M Ritchey, JK Bass, BA Kohrt, J Augustinavicius, L Michalopoulos, MD Burkey, and P Bolton. 2017. “How Is Depression Experienced around the World? A Systematic Review of Qualitative Literature.” Social Science & Medicine 183:151–62.

Heeren, M, L Wittmann, U Ehlert, U Schnyder, T Maier, and J Müller. 2014. “Psychopathology and Resident Status - Comparing Asylum Seekers, Refugees, Illegal Migrants, Labor Migrants, and Residents.” Comprehensive Psychiatry 55(4):818–25.

Helman, CG. 2007. Culture, Health and Illness. Fifth edit. London: Hodder Education.

Henderson, C, J Noblett, H Parke, S Clement, A Caffrey, O Gale-Grant, B Schulze, B Druss, and G Thornicroft. 2014. “Mental Health-Related Stigma in Health Care and Mental Health-Care Settings.” Lancet Psychiatry 1(6):467–82. https://doi.org/https://doi.org/10.1016/s2215-0366(14)00023-6

Hesselink, AE, MN van Poppel, M van Eijsden, JWR Twisk, and MF van der Wal. 2012. The Effectiveness of a Perinatal Education Programme on Smoking, Infant Care, and Psychosocial Health for Ethnic Turkish Women. Midwifery 28 (3), 306–13. https://doi.org/10.1016/j.midw.2011.04.005.

Horvat, L, D Horey, P Romios, and J Kis-Rigo. 2014. Cultural Competence Education for Health Care Professionals (Review).

Hunt, B. 2007. “Managing Equality and Cultural Diversity in the Health Workforce.” Journal of Clinical Nursing 16(12):2252–59.

Hynie, M. 2018. “The Social Determinants of Refugee Mental Health in the Post-Migration Context: A Critical Review.” Canadian Journal of Psychiatry 63(5):297–303. https://doi.org/10.1177/0706743717746666.

Ikram, MUZ. 2016. Social Determinants of Ethnic Minority Health in Europe. PhD Thesis.

Iliffe S, K Walters, J Manthorpe, C Goodman and K Kharicha. 2017. Health and Well-Being Promotion Strategies for ‘hard to Reach’ Older People in England: A Mapping Exercise. Primary Health Care Research and Development 18 (6), 563–73. https://doi.org/10.1017/S1463423617000378.

International Organisation for Migration. 2009. “Social Determinants of Migrant Health.” Retrieved December 19, 2019 (https://www.iom.int/social-determinants-migrant-health).

International Organization for Migration. 2006. “Migration: a social determinant of the Health of Migrants.” Background Paper Assisting Migrants and Communities (AMAC) Project.

International Organization for Migration. 2019. Glossary on Migration. International Migration Law.

International Organization for Migration. 2021. Manual on Community-Based Mental Health and Psychosocial Support in Emergencies and Displacement. Geneva.

International Organization for Migration. 2023. About Migration. IOM Definition of “Migrant”. https://www.iom.int/about-migration

Issack, S. 2015. “Mental Health Help-Seeking Behaviour: African Immigrants’ Experience.” PhD-Theis.

Jacob, K, D Bhugra and AH Mann. 2002. “A Randomised Controlled Trial of an Educational Intervention for Depression among Asian Women in Primary Care in the United Kingdom.” International Journal of Social Psychiatry 48 (2), 139–48. https://doi.org/10.1177/002076402128783190.

Jarvis, GE, and LJ Kirmayer. 2021. Situating Mental Disorders in Cultural Frames.

Jarvis, GE, LJ Kirmayer, A Gómez-Carrillo, N Krishan Aggarwal, and R Lewis-Fernández. 2020. “Update on the Cultural Formulation Interview.” Focus 18(1):40–46.

Jeknić, R. 2015. “Conceptual and Definitional Polysemy of the Term of Culture in Contemporary Social Sciences.” Balkan Social Science Review 6:137–54.

Jenkins R. 2008. Rethinking Ethnicity. Arguments and Explorations. Second Edi. Los Angeles: Sage Publications.

Jimenez, D, SJ Bartels, V Cardenas, SS Daliwal, and M Alegria. 2012. “Cultural Beliefs and Mental Health Treatment Preferences of Ethnically Diverse Older Adult Consumers in Primary Care.” Am J Geriatr Psychiatry 20 (6): 533–42. https://doi.org/10.1097/JGP.0b013e318227f876.Cultural.

Kagné, B and M Martiniello. 2001. “L’immigration Subsaharienne En Belgique.” Courrier Hebdomadaire Du CRISP n° 1721(16):5.

Kalra, N. 2014. “Struggle of Immigrants: Acculturation, Life Satisfaction and Psychological Wellbeing of UK Nationals and UK Immigrants.” IOSR Journal of Humanities and Social Science 19(11):18–22.

Kao, LE, JR Peteet, and CCH Cook. 2020. “Spirituality and Mental Health.” Journal for the Study of Spirituality 10(1):42–54.

Kewley, C. 2018. “How Do Health Beliefs of African Refugees Influence Attribution of Mental Illness and Help-Seeking Behaviour Following Resettlement in Australia ?” University of Newcastle. Retrieved from http://hdl.handle.net/1959.13/1392682

Khan S, K Lovell, F Lunat, Y Masood, S Shah, B Tomenson and N Husain. 2019. “Culturally-Adapted Cognitive Behavioural Therapy Based Intervention for Maternal Depression: A Mixed-Methods Feasibility Study.” BMC Women’s Health 19 (1), 1–11. https://doi.org/10.1186/s12905-019-0712-7.

Kim, W, AC Yalim, and I Kim. 2021. ““Mental Health Is for Crazy People”: Perceptions and Barriers to Mental Health Service Use among Refugees from Burma.” Community Mental Health Journal, 57(5), 965–972. https://doi.org/10.1007/s10597-020-00700-w

King, R., & Lulle, A. 2016. Research on migration: facing realities and maximising opportunities: a policy review. European Commission, Directorate-General for Research and Innovation.

Kirkland, J. (Ed.). 1992. Herbal and magical medicine: Traditional healing today. Duke University Press.

Kirmayer, LJ and D Bhugra. 2009. “‘Culture and Mental Illness: Social Context and Explanatory Models’ in Psychiatric Diagnosis: Challenges and Prospects.” First Edition edited by IM Salloum, and JE Mezzich. Wiley, pp. 29–40

Kirmayer, LJ and L Ban. 2013. “Cultural Psychiatry: Research Strategies and Future Directions.” Advances in Psychosomatic Medicine 33:97–114.

Kirmayer, LJ, A Gomez-Carrillo, and S Veissière. 2017. “Culture and Depression in Global Mental Health: An Ecosocial Approach to the Phenomenology of Psychiatric Disorders.” Social Science and Medicine 183:163–68.

Kirmayer, LJ, J Guzder, and C Rousseau. 2014. Cultural Consultation - Encountering the Other in Mental Health Care. edited by LJ Kirmayer and J Guzder. New York Heidelberg Dordrecht London: Springer.

Kirmayer, LJ, M Weinfeld, G Burgos, GG Du Fort, JC Lasry, & A Young. 2007. “Use of health care services for psychological distress by immigrants in an urban multicultural milieu.” Canadian Journal of Psychiatry, 52(5), 295–304. https://doi.org/10.1177/070674370705200504

Kirmayer, LJ. 2018. “Cultural Psychiatry in Historical Perspective.” Pp. 3–19 in Textbook of Cultural Psychiatry, edited by D. Bhugra and K. Bhui. Cambridge University Press.

Kirmayer LJ & A. Young. 1998. Culture and somatization: Clinical, epidemiological, and ethnographic perspectives. Psychosom Med; 60:420-30.

Kleinman, A and P Benson. 2006. Anthropology in the Clinic : The Problem of Cultural Competency and How to Fix It, PLoS Medicine, 3(10). https://doi.org/10.1371/journal.pmed.0030294

Kleinman, A, L Eisenberg and B Good. 1978. Culture, Illness, and Care. Clinical Lessons from Anthropologic and Cross-Cultural Research. Annals of Internal Medicine, 88, 251–258. https://doi.org/https://doi.org/10.1176/foc.4.1.140

Kleinman, A. 1977. Depression, somatization and the "new cross-cultural psychiatry." Social Science and Medicine, 11(1), 3–9. https://doi.org/10.1016/0037-7856(77)90138-X

Knifton, L, M Gervais, K Newbigging, N Mirza, N Quinn, N Wilson, and E Hunkins-Hutchison. 2010. "Community Conversation: Addressing Mental Health Stigma with Ethnic Minority Communities." Social Psychiatry and Psychiatric Epidemiology 45(4):497–504. https://doi.org/10.1007/s00127-009-0095-4.

Knipscheer, JW and RJ Kleber. 2008. "Help-Seeking Behavior of West African Migrants." Journal of Community Psychology 36(7):915–28. https://doi.org/10.1002/jcop.20264

Kocken PL, EJ van Zwanenburg and T de Hoop. 2008. "Effects of Health Education for Migrant Females with Psychosomatic Complaints Treated by General Practitioners. A Randomised Controlled Evaluation Study." Patient Education and Counseling 70 (1), 25–30. https://doi.org/10.1016/j.pec.2007.09.016.

Koenig, HG, F Al-Zaben, and TJ VanderWeele. 2020. "Religion and Psychiatry: Recent Developments in Research." BJPsych Advances 26(5):262–72.

Kopinak, JK. 2015. "Mental Health in Developing Countries: Challenges and Opportunities in Introducing Western Mental Health System in Uganda." International Journal of MCH and AIDS 3(1):22–30.

Kronick, R, GE Jarvis, and LJ Kirmayer. 2022. "Migration Mental Health: Immigrants, Refugees and Displaced Persons." P. 73 in Psychiatry, edited by A. Tasman, M. Riba, T. Schutze, C. Ng, C. Alfonso, D. Lecic-Tosevski, S. Kanba, R. Alarcon, and D. Ndetei. Springer.

Kronick, Rachel. 2018. "Mental Health of Refugees and Asylum Seekers: Assessment and Intervention." Canadian Journal of Psychiatry 63(5):290–96.

Kumar, K, D Tardif-Douglin, K Maynard, P Manikas, and C Knapp. 1996. "Rebuilding Post-Genocide Rwanda." Pp. 32–41 in The international response to conflict and genocide: Lessons from the Rwanda experience, edited by J. Eriksson. Overseas Development Institute.

Kuo, BCH. 2014. "Coping, Acculturation, and Psychological Adaptation among Migrants: A Theoretical and Empirical Review and Synthesis of the Literature." Health Psychology and Behavioral Medicine 2(1):16–33.

La Cascia C, G Cossu, J Lindert, A Holzinger, T Zreik, A Ventriglio and D Bhugra. 2020. "Migrant Women-Experiences from the Mediterranean Region." Clinical Practice & Epidemiology in Mental Health 16 (1): 101–8. https://doi.org/10.2174/1745017902016010101.

Langlois, EV, A Haines, G Tomson, and A Ghaffar. 2016. "Refugees: Towards Better Access to Health-Care Services Europe PMC Funders Group." Lancet 387(10016):319–21.

Lazard, L and J McAvoy. 2020. "Doing Reflexivity in Psychological Research: What's the Point? What's the Practice?" Qualitative Research in Psychology 17(2):159–77.

Lebano, A, S Hamed, H Bradby, A Gil-Salmerón, E Durá-Ferrandis, J Garcés-Ferrer, FAzzedine, E Riza, P Karnaki, D Zota, and A Linos. 2020. "Migrants' and Refugees' Health Status and Healthcare in

Europe.Pdf." BMC Public Health 20 (1039). https://doi.org/https://doi.org/10.1186/s12889-020-08749-8

Lechuga, J. 2012. "Explanatory Model of Illness." Pp. 668–70 in Encyclopedia of Immigrant Health.

Legido-Quigley, H, NP Prof, ST Tan, L Pajin, R Suphanchaimat, K Wickramage, M McKee, and K Pottie Prof. 2019. "Healthcare Is Not Universal If Undocumented Migrants Are Excluded." The BMJ 366.

Lepièce, B, C Reynaert, P Van Meerbeeck, and V Lorant. 2014. "General Practice and Ethnicity : An Experimental Study of Doctoring." Pyschiatria Danubina 26 (Suppl:43–47).

Levac D, H Colquhoun and KK O'Brien. 2010. Scoping Studies: Advancing the Methodology. Implementation Science 5 (1), 1–9. https://doi.org/10.1186/1748-5908-5-69.

Levecque, K, I Lodewyckx, and J Vranken. 2007. "Depression and Generalised Anxiety in the General Population in Belgium: A Comparison between Native and Immigrant Groups." Journal of Affective Disorders 97(1–3):229–39.

Levecque, K, I Lodewyckx, and P Bracke. 2009. "Psychological Distress, Depression and Generalised Anxiety in Turkish and Moroccan Immigrants in Belgium." Social Psychiatry and Psychiatric Epidemiology. 44(3):188–97.

Levesque, JF, MF Harris, and G Russell. 2013. "Patient-Centred Access to Health Care: Conceptualising Access at the Interface of Health Systems and Populations." International Journal for Equity in Health 12(18):3262–65. https://doi.org/https://doi.org/10.1186/1475-9276-12-18

Lindert J, M Schouler-Ocak, A Heinz, and S Priebe. 2008. Mental health, health care utilisation of migrants in Europe. European psychiatry: the journal of the Association of European Psychiatrists, 23 Suppl 1, 14–20. https://doi.org/10.1016/S0924-9338(08)70057-9

Linney, C, S Ye, S Redwood, A Mohamed, A Farah, L Biddle, and E Crawley. 2020. "'Crazy Person Is Crazy Person. It Doesn't Differentiate': An Exploration into Somali Views of Mental Health and Access to Healthcare in an Established UK Somali Community." International Journal for Equity in Health 19(1):1–15. https://doi.org/10.1186/s12939-020-01295-0

Littlewood, R and M Lipsedge. 2005. Aliens and Alienists: Ethnic Minorities and Psychiatry, Third Edition. 3rd editio. London and New York: Routledge.

Lorant, V, C Depuydt, B Gillain, A Guillet, and V Dubois. 2007. "Involuntary Commitment in Psychiatric Care: What Drives the Decision?" Social Psychiatry and Psychiatric Epidemiology 42(5):360–65.

Lovell K, J Lamb, L Gask, P Bower, W Waheed, C Chew-Graham, J Lamb, et al. 2014. Development and Evaluation of Culturally Sensitive Psychosocial Interventions for Under-Served People in Primary Care. BMC Psychiatry 14 (1). https://doi.org/10.1186/s12888-014-0217-8.

Lu, J, S Jamani, J Benjamen, E Agbata, O Magwood, and K Pottie. 2020. "Global Mental Health and Services for Migrants in Primary Care Settings in High-Income Countries: A Scoping Review." International Journal of Environmental Research and Public Health 17(22):1–28. https://doi.org/10.3390/ijerph17228627

Lwembe S, SA Green, J Chigwende, T Ojwang and R Dennis. 2017. Co-Production as an Approach to Developing Stakeholder Partnerships to Reduce Mental Health Inequalities: An Evaluation of a Pilot

Service. Primary Health Care Research and Development 18 (1), 14–23. https://doi.org/10.1017/S1463423616000141.

Maier, T, M Schmidt, and J Müller. 2010. “Mental Health and Healthcare Utilisation in Adult Asylum Seekers.” Swiss Medical Weekly 140 (December); 27. https://doi.org/10.4414/smw.2010.13110

Makanjuola, V, Y Esan, B Oladeji, L Kola, J Appiah-Poku, B Harris, C Othieno, L Price, S Seedat, and O Gureje. 2016. “Explanatory Model of Psychosis: Impact on Perception of Self-Stigma by Patients in Three Sub-Saharan African Cities.” Social Psychiatry and Psychiatric Epidemiology 51(12):1645–54. https://doi.org/10.1007/s00127-016-1274-8

Malone KM, SG McGuinness, E Cleary, J Jefferies, C Owens and CC Kelleher. 2017. Lived Lives: A Pavee Perspective. An Arts-Science Community Intervention around Suicide in an Indigenous Ethnic Minority. Wellcome Open Research 2, 1–18. https://doi.org/10.12688/wellcomeopenres.11330.1.

Manohar, ND, P Liamputtong, S Bhole, and A Arora. 2017. “Researcher Positionality in Cross-Cultural and Sensitive Research.” Pp. 1–15 in Handbook of Research Methods in Health Social Sciences, edited by P. Liamputtong. Springer Nature Singapore.

Mantovani N, M Pizzolati and S Gillard. 2017. Engaging Communities to Improve Mental Health in African and African Caribbean Groups: A Qualitative Study Evaluating the Role of Community Well-Being Champions. Health and Social Care in the Community 25 (1), 167–76. https://doi.org/10.1111/hsc.12288.

Markova, V, and GM Sandal. 2016. “Lay Explanatory Models of Depression and Preferred Coping Strategies among Somali Refugees in Norway. A Mixed-Method Study.” Frontiers in Psychology 7 (SEP). https://doi.org/10.3389/fpsyg.2016.01435.

Marmot M, J Allen, P Goldblatt, T Boyce, D McNeish, M Grady and I Geddes. 2010. Fair Society, Healthy Lives - Strategic Review of Health Inequalities in England Post-2010. Public Health. http://www.ucl.ac.uk/marmotreview.

Marsella AJ. 2011. “Twelve Critical Issues for Mental Health Professionals Working with Ethno-Culturally Diverse Populations.” Psychology International. October: 6–9. https://www.apa.org/international/pi/2011/10/critical-issues.

Martin, F and SP Sashidharan. 2023. “The Mental Health of Adult Irregular Migrants to Europe: A Systematic Review.” Journal of Immigrant and Minority Health 25(2):427–35.

Marwaha JS and JC Kvedar. 2021. Cultural adaptation: a framework for addressing an often-overlooked dimension of digital health accessibility. NPJ Digital Medicine 4 (1), 1-2.

Mathur R, K Bhaskaran, N Chaturvedi, DA Leon, T VanStaa, E Grundy and L Smeeth. 2014. “Completeness and Usability of Ethnicity Data in UK-Based Primary Care and Hospital Databases.” Journal of Public Health 36 (4): 684–92.

Matlin, SA, A Depoux, S Schütte, A Flahault, and L Saso. 2018. “Migrants’ and Refugees’ Health: Towards an Agenda of Solutions.” Public Health Reviews 39(1):1–55.

Mayne J. 2020. Sustainability analysis of intervention benefits: a theory of change approach. Canadian Journal of Program Evaluation 35, 204–2021

Mayston, R, S Frissa, B Tekola, C Hanlon, M Prince, and A Fekadu. 2020. “Explanatory Models of Depression in Sub-Saharan Africa: Synthesis of Qualitative Evidence.” Social Science and Medicine 246 (June 2019). https://doi.org/10.1016/j.socscimed.2019.112760.

Mbwayo, AW, DM Ndetei, V Mutiso, and LI Khasakhala. 2013. “Traditional Healers and Provision of Mental Health Services in Cosmopolitan Informal Settlements in Nairobi, Kenya.” African Journal of Psychiatry (South Africa) 16(2):134–40.

McCann, J. 2016. “Is Mental Illness Socially Constructed.” Journal of Applied Psychology and Social Science 2(1):1–11.

McCann, TV, A Renzaho, J Mugavin, and DI Lubman. 2018. “Stigma of Mental Illness and Substance Misuse in Sub-Saharan African Migrants: A Qualitative Study.” International Journal of Mental Health Nursing 27(3):956–65. https://doi.org/10.1111/inm.12401

McCann, TV, J Mugavin, A Renzaho, and DI Lubman. 2016. “Sub-Saharan African Migrant Youths’ Help-Seeking Barriers and Facilitators for Mental Health and Substance Use Problems: A Qualitative Study.” BMC Psychiatry 16(1):1–10.

Mehta, N. 2011. “Mind-Body Dualism: A Critique from a Health Perspective.” Mens Sana Monographs 9(1):202–9.

Mendenhall, E, R Rinehart, C Musyimi, E Bosire, D Ndetei, and V Mutiso. 2019. “An Ethnopsychology of Idioms of Distress in Urban Kenya.” Transcultural Psychiatry 56(4):620–42. https://doi.org/10.1177/1363461518824431

Mental Health Europe. 2019. EU Funds for Migrants’ Mental Health: Some Considerations.

Meyer, Thorsten. 2015. “Health Research, Qualitative.” International Encyclopedia of the Social & Behavioral Sciences, Elsevier. Second edition, Volume 10. http://dx.doi.org/10.1016/B978-0-08-097086-8.14053-X

Meys, E, K Hermans, and C Van Audenhove. 2014. Geestelijke Gezondheidszorg En Uitsluiting. Rapport KBS-Project. Leuven: KU Leuven.

Mills, C and S Fernando. 2014. “Globalising Mental Health or Pathologising the Global South? Mapping the Ethics, Theory and Practice of Global Mental Health.” Disability and the Global South 1(2):188–202.

Misra, S, VW Jackson, J Chong, K Choe, C Tay, J Wong, and LH Yang. 2021. “Systematic Review of Cultural Aspects of Stigma and Mental Illness among Racial and Ethnic Minority Groups in the United States: Implications for Interventions.” American Journal of Community Psychology 68(3–4):486–512. https://doi.org/10.1002/ajcp.12516

Missinne, S and P Bracke. 2012. “Depressive Symptoms among Immigrants and Ethnic Minorities : A Population Based Study in 23 European Countries.” Social Psychiatry and Psychiatric Epidemiology 97–109. https://doi.org/10.1007/s00127-010-0321-0

Mistiaen, P, J Cornelis, J Detollenaere, S Devriese, MI Farfan-Portet, and C Ricour. 2019. Organisation of Mental Health Care for Adults in Belgium. Brussels.

Mollah, TN, J Antoniades, FI Lafeer, and B Brijnath. 2018. “How Do Mental Health Practitioners Operationalise Cultural Competency in Everyday Practice? A Qualitative Analysis.” BMC Health Services Research 18(1):1–12. https://doi.org/10.1186/s12913-018-3296-2

Mölsä, ME, KH Hjelde and M Tiilikainen. 2010. ‘Changing Conceptions of Mental Distress Among Somalis in Finland’. Transcultural Psychiatry 47 (2), 276–300. https://doi.org/10.1177/1363461510368914

Monteiro, NM. 2015. “Addressing Mental Illness in Africa: Global Health Challenges and Local Opportunities.” Community Psychology in Global Perspective 1(2):78–95.

Muga, FA and R Jenkins. 2008. “Public Perceptions, Explanatory Models and Service Utilisation Regarding Mental Illness and Mental Health Care in Kenya.” Social Psychiatry and Psychiatric Epidemiology 43(6):469–76. https://doi.org/10.1007/s00127-008-0334-0

Mupara, LM., JJO Mogaka, WR Brieger, and JM Tsoka-Gwegweni. 2022. “Community Health Worker Programmes’ Integration into National Health Systems: Scoping Review.” African Journal of Primary Health Care & Family Medicine 14(1).

Myers, HF. 2009. “Ethnicity- and Socio-Economic Status-Related Stresses in Context: An Integrative Review and Conceptual Model.” Journal of Behavioral Medicine 32(1):9–19. https://doi.org/10.1007/s10865-008-9181-4.

Myria. 2019. “Migratie in Cijfers En in Rechten 2019.” Federaal Migratiecentrum.

Myria. 2022. “Migratie in Cijfers En in Rechten 2022.” Federaal Migratiecentrum.

Ndetei, DM, V Mutiso, A Maraj, KK Anderson, C Musyimi, and K McKenzie. 2016. “Stigmatizing Attitudes toward Mental Illness among Primary School Children in Kenya.” Social Psychiatry and Psychiatric Epidemiology 51(1):73–80.

Ngoma, MC, M Prince and A Mann. 2003. “Common Mental Disorders among Those Attending Primary Health Clinics and Traditional Healers in Urban Tanzania.” British Journal of Psychiatry 183(OCT.):349–55.

Noppe, J, M Vanweddingen, G Doyen, K Stuyck, Y Feys, and P Buysschaert. 2018. Vlaamse Migratie- En Integratiemonitor 2018. Brussel.

Nosè, M, F Ballette, I Bighelli, G Turrini, M Purgato, W Tol, S Priebe, and C Barbui. 2017. “Psychosocial Interventions for Post-Traumatic Stress Disorder in Refugees and Asylum Seekers Resettled in High-Income Countries: Systematic Review and Meta-Analysis.” PLoS ONE 12(2):1–16. https://doi.org/10.1371/journal.pone.0171030.

Nöstlinger C, E Van Landeghem, J Vanhamel, A Rotsaert, L Manirankunda, C Ddungu, T Reyniers, D Katsuva, J Vercruyssen, S Dielen and M Meudec. 2022. COVID-19 as a social disease: qualitative analysis of COVID-19 prevention needs, impact of control measures and community responses among racialized/ethnic minorities in Antwerp, Belgium. International Journal for Equity in Health, 21(1), pp.1-13.

Nöstlinger, C, J Loos, and X Verhoest. 2015. “Coping with HIV in a Culture of Silence: Results of a Body-Mapping Workshop.” AIDS Research and Human Retroviruses 31(1):47–48.

Nowak, AC, N Nutsch, TM Brake, LM Gehrlein, and O Razum. 2023. “Associations between Postmigration Living Situation and Symptoms of Common Mental Disorders in Adult Refugees in Europe: Updating Systematic Review from 2015 Onwards.” BMC Public Health 23(1):1289.

O’Mahony, JM and TT Donnelly. 2007. “The Influence of Culture on Immigrant Women’s Mental Health Care Experiences from the Perspectives of Health Care Providers.” Issues in Mental Health Nursing 28(5):453–71. https://doi.org/10.1080/01612840701344464.

O’Malley, P. 2018. “Migration and Conflict.” New England Journal of Public Policy 30(2):14. Available at: https://scholarworks.umb.edu/nejpp/vol30/iss2/14

Obrist, B and S Büchi. 2008. “Stress as an Idiom for Resilience : Health and Migration among Sub-Saharan Africans in Switzerland.” (December 2014):37–41.

Office for National Statistics. 2011. Office for National Statistics (2011) Census. UK. https://www.ons.gov.uk/census/historiccensusdata/get2011censusdatafromnomis.

Ogundare, T. 2020. “Culture and Mental Health: Towards Cultural Competent Mental Health Delivery.” Journal of Health and Social Sciences 5(1):23–24.

Ojagbemi, A, & O Gureje. 2021. Sociocultural contexts of mental illness experience among Africans. Transcultural Psychiatry, 58(4), 455–459. https://doi.org/10.1177/13634615211029055

Olsen, WC and C Sargent, eds. 2017. African Medical Pluralism. Journal of Chemical Information and Modeling. Vol. 53. Bloomington and Indiapolis: Indiana University Press.

Olukotun, O, K Gondwe, and L Mkandawire-Valhmu. 2019. “The Mental Health Implications of Living in the Shadows: The Lived Experience and Coping Strategies of Undocumented African Migrant Women.” Behavioral Sciences 9(12).

Osborn, TL, A Kleinman, and JR Weisz. 2021. “Complementing Standard Western Measures of Depression with Locally Co-Developed Instruments: A Cross-Cultural Study on the Experience of Depression among the Luo in Kenya.” Transcultural Psychiatry 58(4):499–515. https://doi.org/10.1177/13634615211000555.

Osman F, L Vixner, R Flacking, M Klingberg-Allvin, UK Schön and R Salari. 2021. Impact of a Culturally Tailored Parenting Programme on the Mental Health of Somali Parents and Children Living in Sweden: A Longitudinal Cohort Study. BMJ Open 11 (8), 1–8. https://doi.org/10.1136/bmjopen-2020-045067.

Osman F, R Salari, M Klingberg-Allvin, UK Schön and R Flacking. 2017. Effects of a Culturally Tailored Parenting Support Programme in Somali-Born Parents’ Mental Health and Sense of Competence in Parenting: A Randomised Controlled Trial. BMJ Open 7 (12), 1–9. https://doi.org/10.1136/bmjopen-2017-017600.

Otake, Y and T Tamming. 2021. “Sociality and Temporality in Local Experiences of Distress and Healing: Ethnographic Research in Northern Rwanda.” Transcultural Psychiatry 58(4):546–60.

Palinkas, LA. 2014. “Qualitative Methods in Mental Health Services Research.” J Clin Child Adolesc Psychol 43(6):851–61.

Pannetier, J, F Lert, M Jauffret Roustide, and A Desgrées du Loû. 2017. “Mental Health of Sub-Saharan African Migrants: The Gendered Role of Migration Paths and Transnational Ties.” SSM - Population Health 3(June):549–57. https://doi.org/10.1016/j.ssmph.2017.06.003

Patanè, M, S Ghane, E Karyotaki, P Cuijpers, L Schoonmade, L Tarsitani, and M Sijbrandij. 2022. “Prevalence of Mental Disorders in Refugees and Asylum Seekers: A Systematic Review and Meta-Analysis.” Global Mental Health 9:250–63.

Patel, AR and BJ Hall. 2021. “ Beyond the DSM-5 Diagnoses: A Cross-Cultural Approach to Assessing Trauma Reactions .” Focus 19(2):197–203.

Patel, K, A Kouvonen, C Close, A Väänänen, DO Reilly, and M Donnelly. 2017. “What Do Register-Based Studies Tell Us about Migrant Mental Health ? A Scoping Review.” 1–11.

Patel, V. 1995. “Explanatory Models of Mental Illness in Sub-Saharan Africa.” Sco Sci Med 40(9):1291–98.

Pattyn, E, M Verhaeghe, C Sercu, and P Bracke. 2014. “Public Stigma and Self-Stigma: Differential Association with Attitudes toward Formal and Informal Help Seeking.” Psychiatric Services 65(2):232–38. https://doi.org/10.1176/appi.ps.201200561

Peñuela-O’Brien, E, MW Wan, D Edge, and K Berry. 2022. “Health Professionals’ Experiences of and Attitudes towards Mental Healthcare for Migrants and Refugees in Europe: A Qualitative Systematic Review.” Transcultural Psychiatry.

Phillimore, J and SY Cheung. 2021. “The Violence of Uncertainty: Empirical Evidence on How Asylum Waiting Time Undermines Refugee Health.” Social Science and Medicine 282(October 2020):114154. https://doi.org/10.1016/j.socscimed.2021.114154

Phillimore, J, T Brand, H Bradby, and B Padilla. 2019. “Healthcare Bricolage in Europe’s Superdiverse Neighbourhoods: A Mixed Methods Study.” BMC Public Health 19(1):1–14. https://doi.org/10.1186/s12889-019-7709-x

Pon, G. 2009. “Cultural Competency as New Racism: An Ontology of Forgetting.” Journal of Progressive Human Services 20(1):59–71. https://doi.org/10.1080/10428230902871173

Porter, M., & Haslam, N. 2005. Predisplacement and postdisplacement factors associated with mental health of refugees and internally displaced persons: a meta-analysis.. JAMA, 294 5, 602-12 . https://doi.org/10.1001/JAMA.294.5.602.

Priebe, S, D Giacco, and R El-Nagib. 2016. Public Health Aspects of Mental Health Among Migrants and Refugees: A Review of the Evidence on Mental Health Care for Refugees, Asylum Seekers and Irregular Migrants in the WHO European Region. Copenhagen.

Prost, E, S Musisi, ES Okello, and WM Hopman. 2013. “The Role of Psycho-Education in Improving Outcome at a General Hospital Psychiatry Clinic in Uganda.” African Journal of Psychiatry (South Africa) 16(4):264–70. https://doi.org/10.4314/ajpsy.v16i4.35.

Purgato, M, J Richards, E Prina, A Kip, L Del Piccolo, G Michencigh, M Rimondini, D Rudi, F Vitali, M Giovanni Carta, N Morina, F Schena, and C Barbui. 2021. “Efficacy of Physical Activity Interventions on Psychological Outcomes in Refugee, Asylum Seeker and Migrant Populations: A Systematic Review and

Meta-Analysis." Psychology of Sport and Exercise 54(January). https://doi.org/10.1016/j.psychsport.2021.101901

Rabiee F, A Robbins and M Khan. 2015. "Gym for Free: The Short-Term Impact of an Innovative Public Health Policy on the Health and Wellbeing of Residents in a Deprived Constituency in Birmingham, UK." Health Education Journal 74 (6), 691–704. https://doi.org/10.1177/0017896914553957.

Rechel, B, P Mladovsky, D Ingleby, JP Mackenbach, and M McKee. 2013. "Migration and Health in an Increasingly Diverse Europe." The Lancet 381(9873):1235–45.

Reijneveld MSA, MH Westhoff and M Hopman-Rock. 2003. Promotion of Health and Physical Activity Improves the Mental Health of Elderly Immigrants: Results of a Group Randomised Controlled Trial among Turkish Immigrants in the Netherlands Aged 45 and Over. Journal of Epidemiology and Community Health, 57, 405–11. https://doi.org/10.1136/jech.57.6.405.

Riza, E, S Kalkman, A Coritsidis, S Koubardas, S Vassiliu, D Lazarou, P Karnaki, D Zota, M Kantzanou, T Psaltopoulou, and A Linos. 2020. "Community-Based Healthcare for Migrants and Refugees: A Scoping Literature Review of Best Practices." Healthcare (Switzerland) 8(2). https://doi.org/10.3390/healthcare8020115.

Roberfroid, D, M Dauvrin, I Keygnaert, A Desomer, B Kerstens, C Camberlin, J Gysen, V Lorant, and I Derluyn. 2015. What Health Care for Undocumented Migrants in Belgium? Brussels: Belgian Health Care Knowledge Centre (KCE).

Rodgers, C. 2012. "Illness Explanatory Models in Contemporary Research: A Critique of the Explanatory Model Interview Catalogue." University of Pittsburgh.

Rondelez, E, S Bracke, G Roets, C Vandekinderen, and P Bracke. 2018. "Revisiting Goffman: Frames of Mental Health in the Interactions of Mental Healthcare Professionals with Diasporic Muslims." Social Theory and Health 16(4):396–413.

Rose, AL and M Cheung. 2012. "DSM-5 Research: Assessing the Mental Health Needs of Older Adults from Diverse Ethnic Backgrounds." Journal of Ethnic and Cultural Diversity in Social Work 21(2):144–67.

Saharso, S. 2019. Who needs integration? Debating a central, yet increasingly contested concept in migration studies. Comparative Migration Studies, 7(1), 1-3. https://doi.org/10.1186/s40878-019-0123-9

Said, M, G Boardman, and S Kidd. 2021. "Barriers to Accessing Mental Health Services in Somali-Australian Women: A Qualitative Study." International Journal of Mental Health Nursing 30(4):931–38. https://doi.org/10.1111/inm.12846

Salami, B, J Salma, and K Hegadoren. 2019. "Access and Utilization of Mental Health Services for Immigrants and Refugees: Perspectives of Immigrant Service Providers." International Journal of Mental Health Nursing 28(1):152–61. https://doi.org/10.1111/inm.12512

Salami, B, M Yaskina, K Hegadoren, E Diaz, S Meherali, A Rammohan, and Y Ben-Shlomo. 2017. "Migration and Social Determinants of Mental Health: Results from the Canadian Health Measures Survey." Canadian Journal of Public Health 108(4):362–67. https://doi.org/10.17269/cjph.108.6105

Samele, C, S Frew, and N Urquía. 2013. Mental Health Systems in the European Union Member States, Status of Mental Health in Populations and Benefits to Be Expected from Investments into Mental Health.

Sandhu, S, NV Bjerre, M Dauvrin, S Dias, A Gaddini, T Greacen, E Ioannidis, U Kluge, NK Jensen, M Lamkaddem, R Puigpinos i Riera, Z Kosa, U Wihlman, M Stankunas, C Strassmayr, K Wahlbeck, M Welbel, and S Priebe. 2013. "Experiences with Treating Immigrants : A Qualitative Study in Mental Health Services across 16 European Countries." Soc Psychiatry Psychatr Epidemiol 48:105–16. https://doi.org/10.1007/s00127-012-0528-3

Sangalang, CC and C Vang. 2017. "Intergenerational Trauma in Refugee Families: A Systematic Review." Journal of Immigrant and Minority Health 19(3):745–54. https://doi.org/10.1007/s10903-016-0499-7.

Sangaramoorthy, T and MA Carney. 2021. "Immigration, Mental Health and Psychosocial Well-Being." Medical Anthropology: Cross Cultural Studies in Health and Illness 40(7):591–97.

Sargent, C and S Larchanché. 2009. "The Construction of 'Cultural Difference' and Its Therapeutic Significance in Immigrant Mental Health Services in France." Culture, Medicine and Psychiatry 33(1):2–20. https://doi.org/10.1007/s11013-008-9115-1

Satinsky, E, DC Fuhr, A Woodward, E Sondorp, and B Roberts. 2019. "Mental Health Care Utilisation and Access among Refugees and Asylum Seekers in Europe: A Systematic Review." Health Policy 123(9):851–63.

Scheid, TL and TN Brown. 2010. A Handbook for the Study of Mental Health. Vol. 6. 2nd Editio. edited by T. L. Scheid and T. N. Brown. Cambridge, New York, Melbourne, Madrid, Cape Town, Singapore, São Paulo, Delhi, Dubai, Tokyo: Cambridge University Press.

Scheppers, E, E Van Dongen, J Dekker, J Geertzen, and J Dekker. 2006. "Potential Barriers to the Use of Health Services among Ethnic Minorities: A Review." Family Practice 23(3):325–48. https://doi.org/10.1093/fampra/cmi113

Schoonvaere, Q and N Perrin. 2010. Migraties En Migrantenpopulaties in België.

Schoonvaere, Q. 2010. "Aanwezigheid in België : Analyse van de Voornaamste Demografische Gegevens 3 . De Congolese Migratie Naar België : Een Bijzondere Internationale En van de Populatie Afkomstig Uit de Congolese Migratiestromen 43." 1–87.

Scott, K, S Beckham, M Gross, G Pariyo, K Rao, G Cometto, and H Perry. 2018. "What Do We Know about Community-Based Health Programs? A Systematic Review of Existing Reviews on Community Health Workers and Their Integration with Health Systems." Human Resources for Health 16(1):16–39.

Selkirk, M, E Quayle, and N Rothwell. 2014. "A Systematic Review of Factors Affecting Migrant Attitudes towards Seeking Psychological Help." Journal of Health Care for the Poor and Underserved 25(1):94–127. https://doi.org/10.1353/hpu.2014.0026

Selvarajah, S, SC Maioli, TA Deivanayagam, P de Morais Sato, D Devakumar, SS Kim, JC Wells, M Yoseph, I Abubakar, and Y Paradies. 2022. "Racism, Xenophobia, and Discrimination: Mapping Pathways to Health Outcomes." The Lancet 400(10368):2109–24.

Siddiqui F, U Lindblad, PM Nilsson and L Bennet. 2019. Effects of a Randomized, Culturally Adapted, Lifestyle Intervention on Mental Health among Middle-Eastern Immigrants. European Journal of Public Health 29 (5): 888–94. https://doi.org/10.1093/eurpub/ckz020.

Silwal, S, V Lehti, R Chudal, A Suominen, L Lien, and A Sourander. 2019. "Parental Immigration and Offspring Post-Traumatic Stress Disorder: A Nationwide Population-Based Register Study." Journal of Affective Disorders 249:294–300. https://doi.org/10.1016/j.jad.2019.02.002

Simms, A, S Berdai-Chaouni, S Tricas-Sauras and L De Donder. 2022. Barriers and facilitators in providing care for patients with a migration background. Journal of Clinical Nursing, (July), 1–14. https://doi.org/10.1111/jocn.16491

Simms, C. 2013. "Voice: The Importance of Diversity in Healthcare." International Journal of Clinical Practice 67(5):394–96.

Siriwardhana, C, B Roberts, and M McKee. 2017. Vulnerability and Resilience.

Snel, E., & Leerkes, A. 2006. Transnational involvement and social integration. Global Networks (Vol. 6). Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.723.644&rep=rep1&type=pdf

Snel, E, Ö Bilgili, and R Staring. 2021. "Migration Trajectories and Transnational Support within and beyond Europe." Journal of Ethnic and Migration Studies 47(14):3209–25.

Sorketti, EA, N Zuraida Zainal, and M Hussain Habil. 2013. "The Treatment Outcome of Psychotic Isorders by Traditional Healers in Central Sudan." International Journal of Social Psychiatry 59(4):365–76.

Spallek J, H Zeeb and O Razum. 2011). "What do we have to know from migrants' past exposures to understand their health status? A life course approach." Emerging Themes in Epidemiology, 8 (6) https://doi.org/10.1186/1742-7622-8-6

StatBel. 2022. Cijfers Immigratie Oost-Afrika. Verkregen via e-Mail.

Stern C, Z Jordan and A Mcarthur. 2014. Developing the Review Question and Inclusion Criteria. American Journal of Nursing 114 (4), 53–56. https://doi.org/10.1097/01.NAJ.0000445689.67800.86.

Straiton, ML, HML Ledesma, and TT Donnelly. 2018. "'It Has Not Occurred to Me to See a Doctor for That Kind of Feeling': A Qualitative Study of Filipina Immigrants' Perceptions of Help Seeking for Mental Health Problems." BMC Women's Health 18(1):1–11. https://doi.org/10.1186/s12905-018-0561-9

Straiton, M., Reneflot, A., & Diaz, E. 2016. Mental Health of Refugees and Non-refugees from War-Conflict Countries: Data from Primary Healthcare Services and the Norwegian Prescription Database. Journal of Immigrant and Minority Health, 19, 582 - 589. https://doi.org/10.1007/s10903-016-0450-y.

Stroeken, K. 2017. "The Individualization of Illness." In African Medical Pluralism, edited by William C Olsen and Carolyn Sargent, 151–69. Bloomington and Indiapolis: Indiana University Press.

Sturm, G, T Baubet, and MR Moro. 2010. "Culture, Trauma, and Subjectivity: The French Ethnopsychoanalytic Approach." Traumatology 16(4):27–38.

Suphanchaimat, R, K Kantamaturapoj, W Putthasri, and P Prakongsai. 2015. "Challenges in the Provision of Healthcare Services for Migrants: A Systematic Review through Providers' Lens." BMC Health Services Research 15(1):1–14. https://doi.org/10.1186/s12913-015-1065-z.

Teferra, S and T Shibre. 2012. "Perceived Causes of Severe Mental Disturbance and Preferred Interventions by the Borana Semi-Nomadic Population in Southern Ethiopia : A Qualitative Study." BMC Psychiatry. https://doi.org/10.1186/1471-244X-12-79

Thomas, F. 2010. "Transnational Health and Treatment Networks: Meaning, Value and Place in Health Seeking amongst Southern African Migrants in London." Health and Place 16(3):606–12. http://dx.doi.org/10.1016/j.healthplace.2010.01.006

Thomas, P, P Bracken, and S Yasmeen. 2007. "Explanatory Models for Mental Illness: Limitations and Dangers in a Global Context." Pakistan Journal of Neurological Sciences 2(3):176–81.

Tortelli, A, C Morgan, A Szoke, A Nascimento, N Skurnik, E Monduit De Caussade, E Fain-Donabedian, F Fridja, M Henry, F Ezembe, and R M. Murray. 2014. "Different Rates of First Admissions for Psychosis in Migrant Groups in Paris." Social Psychiatry and Psychiatric Epidemiology 49(7):1103–9. https://doi.org/10.1007/s00127-013-0795-7

Tricco AC, E Lillie, W Zarin, KK O'Brien, H Colquhoun, D Levac, D Moher et al. 2018. PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation. Annals of Internal Medicine 169 (7), 467–73. https://doi.org/10.7326/M18-0850.

Tribe R & S. Melluish. 2014. Globalization, culture and mental health, International Review of Psychiatry, 26:5, 535-537, DOI: 10.3109/09540261.2014.955086

Turrini, G, M Purgato, F Ballette, M Nosè, G Ostuzzi, and C Barbui. 2017. "Common Mental Disorders in Asylum Seekers and Refugees: Umbrella Review of Prevalence and Intervention Studies." International Journal of Mental Health Systems 11(1):1–14.

Turrini, Giulia, Marianna Purgato, Francesca Ballette, Michela Nosè, Giovanni Ostuzzi, and Corrado Barbui. 2017. "Common Mental Disorders in Asylum Seekers and Refugees: Umbrella Review of Prevalence and Intervention Studies." International Journal of Mental Health Systems 11(1):1–14. https://doi.org/10.1186/s13033-017-0156-0

United States Census Bureau (2020) United States Census Bureau. https://www.census.gov/topics/population/race/about.html.

Ünlü Ince B, P Cuijpers, E Van't Hof, W Van Ballegooijen, H Christensen and H Riper. 2013. Internet-Based, Culturally Sensitive, Problem-Solving Therapy for Turkish Migrants with Depression: Randomized Controlled Trial. Journal of Medical Internet Research 15 (10), 1–15. https://doi.org/10.2196/jmir.2853.

Uphoff, E, L Robertson, B Cabieses, FJ Villalón, M Purgato, R Churchill, and C Barbui. 2020. "An Overview of Systematic Reviews on Mental Health Promotion, Prevention, and Treatment of Common Mental Disorders for Refugees, Asylum Seekers, and Internally Displaced Persons." Cochrane Database of Systematic Reviews 2020(9). https://doi.org/10.1002/14651858.CD013458.pub2

Van Apeldoorn J, C Agyemang and EP Moll Van Charante. 2022. "Use of Ethnic Identifiers to Narrow Health Inequality Gaps." The Lancet Regional Health Europe 18, https://doi.org/10.1016/j.lanepe.2022.100411

Van De Venter E and AM Buller. 2015. “Arts on Referral Interventions: A Mixed-Methods Study Investigating Factors Associated with Differential Changes in Mental Well-Being.” Journal of Public Health (United Kingdom) 37 (1), 143–50. https://doi.org/10.1093/pubmed/fdu028.

Vanheule, S, P Adriaens, A Bazan, P Bracke, I Devisch, JL Feys, B Froyen, S Gerard, DH Nieman, J Van Os, and M Calmeyn. 2019. “Belgian Superior Health Council Advises against the Use of the DSM Categories.” The Lancet Psychiatry 6(9):726.

Van Praag Lore, Stevens Peter A.J. & Van Houtte Mieke. 2016. ‘No more Turkish music!’ The acculturation strategies of teachers and ethnic minority students in Flemish schools, Journal of Ethnic and Migration Studies, 42:8, 1353-1370, DOI:10.1080/1369183X.2015.1103171

Ventevogel, P, M Jordans, R Reis, and J De Jong. 2013. “Madness or Sadness ? Local Concepts of Mental Illness in Four Conflict-Affected African Communities.” Conflict and Health 7(3):1–16. https://doi.org/10.1186/1752-1505-7-3

Verginer, L and BH Juen. 2019. “Spiritual Explanatory Models of Mental Illness in West Nile, Uganda.” Journal of Cross-Cultural Psychology 50(2):233–53.

Vervliet, M, J Lammertyn, E Broekaert, and I Derluyn. 2014. “Longitudinal Follow-up of the Mental Health of Unaccompanied Refugee Minors.” European Child and Adolescent Psychiatry 23(5):337–46.

Voglino, G, MR Gualano, GL Moro, P Forghieri, M Caprioli, H Safwat Mhmoued A Elhadidy, F Bert, and R Siliquini. 2022. “Mental Health and Discrimination among Migrants from Africa: An Italian Cross-Sectional Study.” Journal of Community Psychology 50(1):601–19. https://doi.org/10.1002/jcop.22685

Von Werthern, M, K Robjant, Z Chui, R Schon, L Ottisova, C Mason, and C Katona. 2018. “The Impact of Immigration Detention on Mental Health: A Systematic Review.” BMC Psychiatry 18(1):1–19. https://doi.org/10.1186/s12888-018-1945-y.

Vostanis, P. 2014. “Meeting the Mental Health Needs of Refugees and Asylum Seekers.” British Journal of Psychiatry 204(3):176–77.

Ward, EC, LO Clark, and S Heidrich. 2009. “African American Women’s Beliefs, Coping Behaviors, and Barriers to Seeking Mental Health Services.” Qual Health Res 19 (11): 1589–1601. https://doi.org/10.1177/1049732309350686.African.

Watters, C. 2010. “Migrants, Refugees and Mental Health Care in Europe.” Hellenic Journal of Psychology.

Weiss, MG and D Somma. 2007. “Explanatory Models in Psychiatry.” Pp. 127–40 in Textbook of Cultural Psychiatry, edited by D. Bhugra and K. Bhui. Cambridge: Cambridge University Press.

Wendt, DC and JP Gone. 2012. “Rethinking Cultural Competence: InsightS from Indigenous Community Treatment Settings.” Transcultural Psychiatry 49(2):206–22. https://doi.org/10.1177/1363461511425622.

White, RG, S Jain, DMR Orr, and UM Read. 2017. The Palgrave Handbook of Sociocultural Perspectives on Global Mental Health. edited by R. G. White, S. Jain, D. M. R. Orr, and U. M. Read. Springer Nature.

Whitehead, M and Dahlgren. 1991. “What Can Be Done about Inequalities in Health?” The Lancet.

Williams, B and D Healy. 2001. “Perceptions of Illness Causation among New Referrals to a Community Mental Causation among New Referrals to a Community Mental Health Team: Explanatory Model or Exploratory Map? .” Social Science & Medicine 53:465–76. https://doi.org/10.1016/s0277-9536(00)00349-x

Wilson, S. (2003). The Magical Universe: Everyday Ritual and Magic in Pre-Modern Europe. . https://doi.org/10.2307/3054193.

Wondimagegn, D, C Pain, N Seifu, C Cartmill, AA Alemu, and CR Whitehead. 2023. “Reimagining Global Mental Health in Africa.” 1–6.

World Health Organization. 2010. Mental Health: Strengthening Our Response. Geneva.

World Health Organization. 2013. “Mental Health Action Plan 2013-2020.” WHO Library Cataloguing-in-Publication DataLibrary Cataloguing-in-Publication Data 1–44.

World Health Organization. 2022. World report on the health of refugees and migrants. Geneva: World Health Organization. Licence: CC BY-NC-SA 3.0 IGO.

World Health Organization. 2022a. “Barriers to Mental Healthcare in Africa.” Retrieved September 13, 2023 (https://www.afro.who.int/news/barriers-mental-health-care-africa).

World Health Organization. 2022b. World Mental Health Report: Transforming Mental Health for All. Geneva.

World Health Organization. 2023. “International Classification of Diseases.” Retrieved July 17, 2023 (https://icd.who.int/en).

World Health Organization. Regional Office for Europe (2015). Migrant health in the European Region [webpage]. (http://www.euro.who.int/en/health-topics/health-determinants/migration-and-health/migrant-health-in-the-european-region), accessed 20 May 2015.

Wray, S and M Bartholomew. 2014. “Some Reflections on Outsider and Insider Identities in Ethnic and Migrant Qualitative Research.” Migration Letters 7(1):7–16.

Yang, LH, G Thornicroft, R Alvarado, E Vega, and BG Link. 2014. “Recent Advances in Cross-Cultural Measurement in Psychiatric Epidemiology: Utilizing ‘what Matters Most’ to Identify Culture-Specific Aspects of Stigma.” International Journal of Epidemiology 43(2):494–510. https://doi.org/10.1093/ije/dyu039

Young, A. 1981. “When Rational Men Fall Sick: An Inquiry into Some Assumptions Made by Medical Anthropologists.” Culture, Medicine and Psychiatry 5(4):317–35.

Zeid WA, Andersen JS, Kristiansen M. 2019. Patterns of complementary and alternative medicine use among Arab immigrants in Denmark: A qualitative study. Scandinavian Journal of Public Health;47(7):748-754. doi:10.1177/1403494818799597

Zolezzi, M, M Alamri, S Shaar, and D Rainkie. 2018. “Stigma Associated with Mental Illness and Its Treatment in the Arab Culture: A Systematic Review.” International Journal of Social Psychiatry 64(6):597–609. https://doi.org/10.1177/0020764018789200

Authors' contributions

- 4.1 **Article 1**: "God is my psychologist": How explanatory models of mental health influence healthcare-seeking behaviour among first generation East-African migrants in Belgium

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- 4.2 **Article 2**: Explanatory Models of (Mental) Health Among Sub-Saharan African Migrants in Belgium: A Qualitative Study of Healthcare Professionals' Perceptions and Practices

  Authors: Hanne Apers, Christiana Nöstlinger & Lore Van Praag
  Published in Culture, Medicine and Psychiatry
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  All authors contributed to the study conception. Material preparation and data collection were performed by HA, and data analysis was performed by HA and LVP. The first draft of the manuscript was written by HA and all authors commented on previous versions of the manuscript. All authors read and approved the final manuscript. All authors agree with the content and give explicit consent to submit.

- 4.3 **Article 3**: Impacts for mental health care practices from juxtaposing perspectives on mental health and healthcare provision from healthcare professionals and East-African migrants in Belgium.

  Authors: Hanne Apers, Lore Van Praag, Christiana Nöstlinger & Sarah Van de Velde
  Submitted to Transcultural Psychiatry
  All authors contributed to the study conception. Material preparation, data collection and analysis were performed by HA. The first draft of the manuscript was written by HA and all authors commented on previous versions of the manuscript. All authors read and approved the final manuscript. All authors agree with the content and give explicit consent to submit.

- 4.4 **Article 4:** Interventions to improve the mental health or mental well-being of migrants and ethnic minority groups in Europe: a scoping review

  Authors: Hanne Apers, Lore Van Praag, Christiana Nöstlinger & Charles Agyemang
  Published in Global Mental Health, https://doi.org/10.1017/gmh.2023.15
  CA and HA defined the scope of the review. HA, LVP and CN determined the review methodology, conducted the review, and wrote a first version of the manuscript, which was revised by CA. All authors reviewed the final manuscript.

APPENDIX

Appendix 1: Interview Guide Migrant Participants

INTERVIEW GUIDE

(Introduction on research/researcher)

(Informed consent procedure: permit to record?- Pseudonymization – stopping the interview possible at any time – no good/wrong answers)

First, I would like to get to know you a bit and to have an idea about who you are. I would therefore like to ask you to fill in this short questionnaire, which I will also use to get an overview of all the people I spoke to: for instance, how many women, what was the main age, etc. In that way I can also compare the results of my research. You don't have to write your name anywhere, I will be the only one who knows who filled it out. The information you give will (as all the answers during the interview) be treated anonymously during the analysis and will not be shared with others.

(Socio-demographic questionnaire)

To start this interview, I would like to present you with three scenarios and ask your opinion on them. Remember, there are no right or wrong answers, I am interested in your opinion and thoughts.

Scenario 1: Someone from your ethnic community sends a text message in a group chat on WhatsApp/Signal stating he is not feeling well. He thinks this is because there is a conflict within his family that lives in his country of origin. He asks in his message what he could do about this situation.

- What would you advise him to do?
- Do you think this a realistic scenario?
    - Could this also happen in your community?
- Would you use WhatsApp/ Signal to ask for this kind of advice?

Scenario 2: A friend of you is sleeping very badly since a few weeks and often has nightmares. Her/his mother advised her/him to take contact with their traditional healer. At the same time, your friend also went to see a general practitioner in Belgium, who tells her/him to go see a psychologist.

- What do you think this friend should do?
- What could cause this friend nightmares and sleeping issues?
- Would you describe these sleeping issues as physical issues?
- How would you yourself try to deal with this kind of problems?

Scenario 3: Currently, the government is trying to convince everyone to get vaccinated against Covid-19. But, in the same time, friends and relatives are doubting on social media if this is the right way to go and are even opposed to get a vaccine.

- What do you think about this situation?
- Who gives, according to you, trustworthy information on this matter?
- How would you inform yourself to decide to get vaccinated or not?
- How would people close to you act on this? Your friends? Family? Larger network?
- Could you explain if there are differences between how this is dealt with in Belgium and in your country of origin?

I would like to talk with you ***about the topics of 'health' and 'feeling well in general****, and if you experience differences between your country of origin and Belgium. Talking about your ideas and experiences is very important, as it will learn us more on how people might deal differently with health-related topics. It will give important insights in how should be dealt with these topics on different levels, for example: how people can be reached with prevention campaigns, how inclusive is the Belgian health system and how can this be organized differently, etc.*

- What do you understand by 'feeling well'?
  Can you explain to me what it means for you 'to be healthy'?
  - Is there a difference between the two for you? How?

- How would you notice that someone is not feeling well?
  - What could cause people to not feel well?
  - How does he/she look like, how does he/she behave?
  - How should he/she act upon this situation?
  - How should he/she be treated?

- Do you think this is different with how people of Belgian background look at health?
  - If so, which differences?

- Are body and mind separate things according to you?
- (Cfr. Scenario 2) Sometimes a distinction is made between physical and mental health: what do you think of this?
  - How would you explain what physical health is?
    - Can you give an example?
  - How would you explain what mental health is?
    - Can you give an example?
    - Could you tell me what you would consider as typical mental health symptoms?

I would also like to talk with you about these ***health ideas in your broader network****. How health topics are considered by your family, your friends, your community. Again, this will be very informative to know if there are differences with other communities or groups living in Belgium.*

- Could you describe to me what social networks you have, both here in Belgium or abroad?

- Who do you consider as 'your community'? Is there such a thing as a community?
    - How would you describe the people living in your community?
    - Are they similar to you? In what way?

- Are health topics often discussed in your social networks? If so, in which?
    - Do you make a difference in which health topics you discuss with different people?
        - Can you give an example?
    - What kind of health topics do you discuss with whom?
        - (Friends? Family? Larger network?)
    - How do you discuss health topics?
        - Individually? In group?
        - Would you also use WhatsApp or other channels to discuss health topics? (cfr. Scenario 1)

- Do you think other people in your social networks have the same ideas as you on what is considered as 'feeling well'?
    - If no, what differences do you experience?
    - How does this differ between your friends, family, network with the same migration background?
    - What about 'to be healthy'?

Now, I would like to talk a bit ***on your personal experiences*** *and what you do to remain healthy and feel good.*

- How important is 'being healthy' or 'feeling well' for you?
    - What do you consider as a healthy lifestyle?
    - Who or what do you need to remain healthy?
        - What hinders you?
        - What helps you?
        - How do your social networks support you to remain healthy?

- How do you deal with feeling less well/feeling unhealthy?
    - Who do you contact?
        - Do you ask people in your social networks for help?
            - If yes, can you explain me how?
            - If not, can you explain me why?
    - Is this the same for physical health issues and mental health issues?

- Do you frequently visit health professionals?
    - Which ones?
    - When?
    - How do you experience these visits?

- What do you think about the Belgian healthcare system?
    - Is it trustworthy to you?
    - Is its organization clear to you?
- Do you make use of the Belgian health services?
    - When do you make use of them?
    - What is your experience with these services?
    - What would you change about the health system in Belgium?
- Do you use services from non-conventional health care in Belgium?

- Do you notice differences between you and how people without a migration background deal with health-related topics?
    - Which differences?
    - Do these differences influence you in dealing with your own health?
        - How?

- Do you often turn to your religion to deal with your health status?
    - In which way?
    - Do you think being religious matters for your health?
- Do you consider yourself as a spiritual person?
    - Can you explain how this plays a role in your life?

- Do you use services from non-conventional health care from your country of origin, such as natural healers or traditional healers?
    - Can you explain me when and how you use these services?
    - Do you combine these services with other health services?
        - With health services provided in Belgium?
    - How are these services related to your country of origin?

- Do you have any health practices that are related to your culture of origin?
    - Can you explain what kind of practices?
    - When and how do you apply these practices?
    - In what way is it for you possible to apply this practices in Belgium?
    - How do people in your community think about these practices?

I would also like to talk about how moving to Belgium influenced your health and how you feel.

- Can you tell me how you experienced your move to Belgium?
    - What was your motivation to move to Belgium?
    - What do you think about the reception and integration system?
        - What would you change about these systems, if you could?
    - What was difficult for you about your move to Belgium?
        - How did you find support?
    - What was positive for you about your move to Belgium?

- Would you say that your idea on health changed since your move to Belgium?

    - How did it change?

- Can you tell me how you experience living in Belgium nowadays?
    - What makes you feel good living here?
    - What has been difficult for you?
    - What has changed in your experience since you arrived?
    - Do you identify with the Belgian culture?
        - If yes, can you explain me when and how you identify with the Belgian culture?
        - If no, can you explain me why not?

To finish, I would also like to hear about your experiences with the Covid-19 pandemic.

- How did the pandemic influence your life?
    - What was difficult for you?
    - Was there anything positive about the pandemic for you?
- Did you change the way you live, because of the pandemic?
    - How?

I have no further questions. Is there anything you would like to add?

(Feedback process – give participant list of support organizations)
(Thanks!!)

Appendix 2: Interview Guide Professional participants

Interview Guide – Interviews professionals

(Introduction on research/researcher)

(Informed consent procedure: permit to record?- Pseudonymization – stopping the interview possible at any time – no good/wrong answers)

First, I would like to get to know you a bit and to have an idea about your work as a professional, and the service you work for.

- Can you introduce yourself? Where do you work and what is your role?

- My research is focused on the explanatory models among sub-Saharan African migrants. How often do you come into contact with the research target group within your job and for what reasons?
    - What kind of issues do you notice among these patients?

I would now like to talk about how you think your sub-Saharan African patients think about mental health. As I explained at the start, my research deals with the "explanatory models" among newcomers from sub-Saharan Africa. This refers to how people perceive causes of mental health issues, what the symptoms are, how these issues should be treated, etc.

- Do you think that there are different explanatory models compared to the Belgian (European) population?
    - Why or why not?
    - What do you think are the main differences?
      (Probe for causes, health-seeking behaviour, treatment preferences)
    - How do you deal with these differences in your work/treatment?

Within my research I also want to focus on the coping strategies and what can support the resilience of a person with a migration background.

- Do you think there are differences between newcomers of sub-Saharan African descent and the Belgian (Europen) population in how they cope with potential mental health problems?
    - Why or why not?
    - What do you think are the main differences?
    - What implications do you think this has for healthcare?

An important aspect related to the mental health of this target group is their migration and integration process.

- How do you think this affects the newcomers both in terms of mental health, but possibly also their perception of mental health?
    - How does the migration aspect influence how this target group seeks for help within the healthcare sector according to you?

Now, I would like to discuss some aspects or differences that are often mentioned in scientific literature about sub-Saharan African populations' and Belgian/European/Global North perspectives on mental

health. I would like to know your view on these factors, based on your experiences as a health professional working with this target group

- The difference between individualism / collectivism cultures is often discussed.
  (If participant does not feel familiar with the terms, explain more)
    - Do you notice differences in how you think about this and your sub-Saharan African patients? Which differences do you notice?
    - What implications do you think this has for healthcare? How do you deal with these differences?

- A different approach to the distinction between body / mind between both cultures, is also mentioned in literature.
    - Do you notice differences in how you think about this and your sub-Saharan African patients? Which differences do you notice?
    - What implications do you think this has for healthcare? How do you deal with these differences?

- In literature, as well as through informants, I learned that there is a "traditional" medicine that can be consulted by the target group.
    - Do you have knowledge on these 'traditional' approaches?
    - Do you think traditional medicine plays a big role?
    - What do you think about this? How do you deal with patients who consult or consulted traditional medicine?

- An interesting discussion I came across, is "we need more black therapists" vs "we need more black-thinking therapists".
    - How would you perceive this discussion?
    - What is your opinion about this?

I would also like to talk shortly about the current situation, the Covid-19 pandemic.

- In what way do you think this impacted sub-Saharan African newcomers?
    - Is this different compared to the general population?

I have no further questions. Is there anything you would like to add?

(Thanks!!)

Appendix 3: Socio-demographic questionnaire migrant participants

Drop off sheet

Initials participant: ……

Gender: 0 male

0 female

0 other:……..

Age: ……

Nationality: ……..

Marital status:……

I live: *(multiple answers possible)*

0 Alone

0 With my partner

0 With my children; number of children and their ages:……..

0 Other:……..

I live: 0 In a reception centre

0 In an apartment with/without garden

0 In a house with/without garden

0 Other……

I live: 0 In a city, in the centre. Postal code:……..

0 In a city, in the surrounding area. Postal code:……..

0 In the country-side. Postal code:……..

0 Other……

My current residence status is ……

I arrived in Belgium in (*year*) ……..

Before arriving in Belgium, I lived in (*country*)……..

I was born in (*country*)……..

My mother comes from (*country*)……..

My father comes from (*country*)……..

My **educational** level (completed level):

0 non-formal education

0 primary education

0 secondary education

0 higher education

I currently am: *(multiple answers possible)*

0 employed, profession:……

0 unemployed,

0 unable to work, reason:……

0 a student, I am studying……

0 other:……

My former profession was……..……in……(*country*)

My ideal profession would be……in……(*country*)

I am **religious**:

0 Yes, religion:……

0 No

➔ *If yes:*

- On a scale of 1 to 10, how important is religion in your life? *(Circle the number)*

Not important at all 0 1 2 3 4 5 6 7 8 9 10 *Very important*

- Do you attend religious services?

0 Yes, indicate how often: ……

0 No

- Do you pray?

0 Yes, indicate how often: ……

0 No

I consider my **health** to be: 0 very good

0 good

0 normal

0 not so good

0 not good at all

Which languages do you speak?

Please list the languages and indicate in what level you can speak/read/write them:

Very Good (VG) – Good (G) – Medium (M) – Limited (L) – Not good (N)

Language				
I can speak this language	VG - G - M - L - N	VG - G - M - L - N	VG - G - M - L - N	VG - G - M - L - N
I can read this language	VG - G - M - L - N	VG - G - M - L - N	VG - G - M - L - N	VG - G - M - L - N
I can write in this language	VG - G - M - L - N	VG - G - M - L - N	VG - G - M - L - N	VG - G - M - L - N
It is my mother tongue	YES / NO	YES / NO	YES / NO	YES / NO

Appendix 4: Annex to article 4 "Interventions to improve the mental health or mental well-being of migrants and ethnic minority groups in Europe: a scoping review"

Search string applied:

(("Intervention" OR "Measure" OR "approach") AND ("improv*" OR "promot*" OR "prevent*" OR "optimiz*" OR "optimis*" OR "supporting") AND ("mental health" OR "well-being" OR "mental health outcomes" OR "psycholog*" OR "psychosoc*") AND ("migra*" OR "ethn*" AND "minorit*") AND ("European Union" OR "EU" OR "EEA" OR "Belgium" OR "Bulgaria" OR "Cyprus" OR "Denmark" OR "Germany" OR "Estonia" OR "Finland" OR "France" OR "Greece" OR "Hungary" OR "Ireland" OR "Italy" OR "Croatia" OR "Latvia" OR "Lithuania" OR "Luxembourg" OR "Malta" OR "Netherlands" OR "Austria" OR "Poland" OR "Portugal" OR "Romania" OR "Slovenia" OR "Slovakia" OR "Spain" OR "Czech Republic" OR "United Kingdom" OR "Sweden" OR "England" OR "Scotland" OR "Wales" OR "Northern Ireland" OR "Iceland" OR "Norway" OR "Switzerland" OR "Lichtenstein"))

Table: Quantitative outcome measures (selection of quantitative and mixed-methods studies)

Authors + publication year	Quantitative outcomes measurement tools	Remarks in text concerning cultural validity/adaptation of tools
Afuwape et al., 2010 (*RCT*)	*Study eligibility:* WHO Mental Health Checklist for Anxiety and Depression GHQ- 28: General Health Questionnaire CSRI, Client Service Receipt Inventory - adapted form SF-36, Short Form-36 (quality of life) GAF, Global Assessment of Functioning LEDS, Life Events and Difficulties Schedule	Not discussed
Chaudhry et al., 2009 (*Quantative, observational pilot study*)	SRQ, Self-Reporting Questionnaire (Urdu Version) SCAN, Schedule for Clinical Assessment in Neuropsychiatry	Urdu version of SRQ, validated in specific target population
Eylem et al., 2021 (*Mixed methods study – RCT with qualitative component*)	Feasibility: SUS, System Usability Scale BSS, Beck's Suicidal Ideation Scale BHS, Beck Hopelessness Scale PSWQ-PW, Penn State Worry Questionnaire EQ-5D, Euro Quol – 5 dimensions (Quality of life) SASH, Suicide Attempts and Self-Harm LAS, Lowlands Acculturation Scale (adapted)	All scales show internal consistency. BDI and EQ-5D have been validated in Turkish and Dutch populations. The Turkish version of PSWQ was used. Adapted version of LAS internally consistent in Turkish migrant populations.
Gater et al., 2010	HRSD, Hamilton Rating Scale for Depression	Specific scale developed for rating social functioning

(*Mixed methods study – RCT with qualitative component*)	Verona Service Satisfaction Scale (adapted) Specific scale developed for rating social functioning among Pakistani women	among Pakistani women; measures were (previously) translated; all questionnaires were read to participants to involve low literate participants
Hesselink et al., 2012 (*Non-ranomized trial study*)	CES-D, Center for Epidemiologic Studies Depression Scale	Previously validated in target group
Jacob, Bhugra & Mann, 2002 (*RCT*)	GHQ-12, General Health Questionnaire	GHQ has previously been validated among British Asians. Patients could choose English or Hindi as language for the questionnaire.
Khan et al., 2019 (*Mixed-methods feasibility study*)	EPDS, Edinburgh Postnatal Depression Scale CIS-R, Clinical Interview Schedule – Revised EQ-5D, EuroQol (quality of life) DAS, Dyadic adjustment scale MSPSS, Multidimensional scale of perceived social support Verona Service Satisfaction Scale (adapted)	EPDPS was previously validated with the target group; other instruments were previously used with the target group in other studies.
Knifton et al., 2010 (*Mixed-methods cross-sectional study*)	Self-developed questionnaire, using similar wording to the national Scottish survey of public attitudes to mental health.	Questionnaire was translated into Chinese, Urdu and Hindi, group workers available
Kocken et al., 2008 (*RCT*)	Combined questionnaire with 14 items from BIOPRO, Biographical Problem Inventory List; five items measuring relation between pain and stress; nine items from validated questionnaire on perceived social support, two items from SF36, Short Form Health survey SCL-90, Symptom CheckList (measuring mental health)	Only the unitary index of psychological discomfort of the SCL-90 was presented because of target group; questionnaire was (back) translated by certified interpreters and native speaker
Lovell et al., 2014 (*Mixed-methods study, exploratory randomized trial*)	CORE-OM, Clinical Outcomes in Routine Evaluation – Outcome Measure Scale PHQ-9, Patient Health Questionnaire GAD-7, Generalised Anxiety Disorder assessment WSAS, Work and Social Adjustment Scale EQ-5D, EuroQol (quality of life)	Instruments have previously been used in non-English speaking populations. Existing translations for target languages were used and in case of non-availability instruments were translated and

		adapted as per published guidelines.
Osman et al., 2017 (*RCT*)	GHQ-12, General Health Questionnaire PSOC, Parenting Sense of Competence	Both instruments translated according to international guidelines.
Osman et al., 2021 (*Mixed methods longitudinal impact study of Osman et al, 2017)*	CBCL 6-18, Child Behaviour Checklist 6-18 years (adapted) GHQ-12, General Health Questionnaire	Both instruments were translated following the five steps of the WHO's process of translation. CBCL adapted for Muslim respondents.
Rabiee et al., 2015 (*Mixed methods study*)	Questionnaire evaluating experience in accessing services and perceived changes in health and well-being (developed on basis of literature review)	Two bilingual researchers were trained to administer the questionnaire. Questionnaire was slightly adapted after piloting with the target group.
Reijneveld et al., 2003 (*RCT*)	SF-12/36, Short Form Self-constructed items for measuring knowledge on health and disease, and physical activity	All measures were translated to Turkish by certified Turkish interpreters, and translated back by an independent native speaker and piloted among the target group.
Siddiqui et al., 2019 (*RCT*)	MADRS-S, Montgomery Asberg Depression Rating Scale HADS, Hospital Anxiety and Depression Scale	MADRS-S has not been validated in target population, but HADS shows good validity
Ünlü-Ince et al., 2013 (*RCT*)	CES-D, Center for Epidemiologic Studies Depression Scale HADS, Hospital Anxiety and Depression Scale SCL-90-R, Symptom Checklist-90-Revised (somatization subscale) EQ-5D, EuroQol (quality of life)	Dutch, Turkish and online versions of CES-D have shown good validity and reliability. HADS, SCL-90-R and EQ-5D translations validated by previous studies.