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Mental health of adult refugees in Sweden

A scoping review

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Preface

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ABSTRACT

Studies have indicated that the prevalence of mental health disorders among refugees has increased. The social capital and socioeconomic status of the host country are believed to influence the development and maintenance of mental health. This study aims to generate knowledge about the factors that affect adult refugees' mental illness in Sweden and inquires as to the activities in the labor market for preventing mental illness among adult refugees in Sweden.

This study was conducted using a scoping review method. The author analyzed 14 articles, and the results revealed that refugees are more prone to experiencing mental health problems, such as depression and anxiety, than native-born Swedes. This study revealed that the social capital and socioeconomic status of the host country may influence the development and maintenance of adult refugees' mental health.

Keywords: Mental health/illness, refugees, social capital, social determinants of health, Sweden

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1. Introduction

The number of people in Sweden with foreign backgrounds has increased significantly in recent years. The foreign population constituted 11.3% of the nation's population in 2000 and 19.1% in 2020 (Statistics Sweden, 2020b). Sweden and other EU nations faced a massive migration crisis in 2015. Over 163,000 refugees—mainly from Syria, Iraq, and Afghanistan—sought asylum in Sweden. This caused challenges for authorities, civil society, and municipalities since, as a group, refugees tend to have poorer health than native Swedes. Moreover, mental illness has increased among refugees.

According to the Swedish Public Health Agency (2019), the prevalence of mental illness is increasing globally in both women and young adults. This condition can lead to problems for both society and the individual and affect individuals' quality of life. People with mental illness may have difficulties with their work or studies. From a societal perspective, it can lead to high social costs for example their medication in healthcare, and long sick leaves. While there is no clear-cut explanation as to why many refugees suffer from mental illness, numerous factors in the home country and the host country may play a role. Many refugees have experienced traumatic events in their home country such as violence, abuse, and torture (Angel & Hjern, 2004, p.30–32).

In addition, many refugees have lost their homes and family members. As a result, it is common for these individuals to experience psychological reactions including anxiety, worry, and depression. They may need professional psychiatric help unless they receive the support they need from their families and loved ones (Priebe, Giacco & El-Nagib, 2016).

The author of this study chose this topic to better understand the mental health among refugees because mental illness is increasing among refugees in Sweden. This study's aim is to increase awareness of the mental health burden and to contribute to the research field regarding this vulnerable population.

1.1 Problem formulation

In Sweden, mental health disorders are a prevalent issue among refugees. According to Gilliver et al. (2014), refugees are more prone to experiencing mental health problems than native Swedes because they are exposed to negative health conditions in their home country due to political conflict. In addition, they are likely to face social and cultural differences when they enter a new country.

Mental health disorders among refugees is an emerging research subject, the exact impact of immigration on these conditions is not well understood. Following Gilliver et al. (2014), this scoping study is an updated review that intends to fill this knowledge gap by mapping the available scientific evidence of prevalence of refugees's mental health and factors impacting mental health. Systematic reviews conducted in countries outside of Sweden have investigated the prevalence of and factors that influence mental health. However, studies on refugees' mental health in a Swedish context are not as extensive.

This study may narrow the scientific gap and comprehensively analyze the available evidence on refugees' mental health in Sweden. Using a scoping review method, the study illuminates the subject and contributes to the development of systematic reviews in Sweden. Understanding refugees' mental health can help social workers in Sweden to promote mental health and prevent refugees from developing mental illness. This study also aims to study the link between the labor market and mental health among refugees.

1.2 Pre-understanding of the subject

Pre-understanding pertains to a person's education and experience in a particular area (Polit & Beck, 2017). The author of this study may have influenced the survey because due to a different national origin than Swedish, with experiences of being newly arrived in the country and challenges regarding integration into the new society (e.g., difficulties in creating social relationships since limited language skills are obstacles). In addition, language difficulties may impose restrictions on access to public information. Some periods in the initial stages of the integration process may be experienced as mentally disturbing because of a feeling of being out of context. Caution is therefore exercised to avoid the presentation of the opinions and perceptions of the author in

regard to the challenges that may arise in connection with flight and integration which can affect mental health.

1.3 Aim and questions

The purpose of this study is to gain knowledge about the prevalence of mental illness and factors that affect mental illness among adult refugees in Sweden. It also explores how employment and labor market integration can decrease the likelihood of mental illness in adult refugees in Sweden.

What factors have contributed to the prevalence of mental illness among adult refugees in Sweden?

What health promotion measures in the labor market help to decrease the likelihood of mental illness among adult refugees in Sweden?

1.4 Definitions

This section describes the key concepts used in the present study: mental illness, refugee, integration, and socioeconomic status.

Mental illness

“Mental illness” is often used as an overarching term that encompasses various forms of mental health problems. The most common diagnoses of mental illness are depression, anxiety disorder, and post-traumatic stress disorder (PTSD). These diseases may lead to difficulty sleeping, which in turn can cause problems for the individual in their everyday life (WHO, 2011).

Integration

Integration is described as a social process within a society. Additionally, integration is seen as a developmental process and is considered desirable and positive within a society. The concept is also used to describe the integration of a national majority with another, foreign minority. This results in a division described as an "us-and-them" scenario. The division between minorities and majorities implies an "us" versus "them" distinction. Integration is achieved through complete equality among individuals in society, considering social relationships, politics, and living conditions. Therefore,

integration is not about a one-sided adaptation of newcomers but rather a mutual relationship and adaptation between both groups in society. Consequently, integration becomes a matter for the entire society – not just for refugees (de los Reyes, 2001; Kamali, 2006).

Refugee

According to Priebe, Giacco and El-Nagib (2016) a refugee is a person who—due to their race, religion, nationality, or membership in social groups—flees their homeland. That person is referred to as an asylum seeker until they are granted refugee status by a contracting state or the United Nations High Commissioner for Refugees (UNHCR) if they formally apply for asylum (UNHCR, 2011).

Socioeconomic status

Socioeconomic status is a broad concept that describes various aspects of a person's life. In this study, the author uses the definition of Rostila and Toivanen (2012), who defines socioeconomic as the level of education, income, and profession one has attained. This study uses education, income and profession as an indicator of one's level of socioeconomic status (Galobardes, Shaw, Lawlor, Lynch & Smith, 2006).

1.5 Health-promoting workplace

The concept of a healthy working environment first emerged in Sweden in the 1990s (Källestål, 2004). According to World Health Organization (WHO) guidelines, a health-friendly workplace is a cooperative effort by society, employers, and workers to improve employees' well-being. The vision of a healthy workplace includes improving the working environment, promoting personal development, and increasing employee participation. Health promotion involves continuously improving employees' well-being and work environment. According to Källestål (2004), the concept should be viewed as a continuously developing process.

Menckel and Österblom (2000) state that health promotion in the office involves various activities that help improve the well-being of an individual. Aside from physical health, it also considers psychosocial health as a vital part of the equation. A holistic approach

is needed to provide individuals with opportunities to improve their mental health (Menckel & Österblom, 2000).

Preventing mental illness in working life is done through efforts at the organizational level. The efforts may, for example, focus on increased participation, new processes, and structures, as well as discussions about the work environment. At the individual level, short-term effects can be achieved through interventions that focus, for example, on stress management, mindfulness, yoga, or meditation (Public Health Agency of Sweden, 2021).

There is still a great need for knowledge about possible measures to prevent mental illness in working life. Mental illness (e.g., anxiety, depression, stress, and exhaustion) have become the most common cause of sick leave in Sweden in recent years and often leads to long sick leaves (Public Health Agency of Sweden, 2021).

2. Background

This chapter presents relevant evidence-based research on the topic of mental illness among refugees to illustrate the problem, demonstrate preventive measures against mental illness in refugees and convey how social workers can respond and provide support. It provides an in-depth understanding of the effects of mental illness and how to prevent it. The chapter presents both international and national studies that have focused on mental illness in general, the factors that affect people, and how social workers can promote health and prevent mental illness.

2.1 Health and Public Health

Health is a concept that can be defined in various ways. The WHO describes the concept of health as “*a state of complete physical, mental and social well-being and not mere absence of disease and disability*” (WHO, 1948, p.100).

According to the WHO (2013), social determinants of health are the non-medical factors that influence health outcomes. They are the conditions in which people are born, work, live, and age. Social determinants of mental illness imply that the social and

economic environments that have an impact on the prevalence of mental illness can promote health and prevent ill health in the individuals they treat. The WHO (2013) declares mental health as a state in which every human being can work, integrate, and enjoy life.

According to the National Board of Health and Welfare, 20–30% of refugees groups arriving in Sweden suffer from mental health problems and they seldom seek psychiatric care. A National Board of Health report showed that 73% of the general population is mentally healthy, yet mental illness is a growing health problem among refugees (National Board of Health, 2019).

2.2 Determinants of health

Whitehead and Dahlgren (2006) explain health determinants at various levels, from genetic factors to structural factors such as socioeconomic, environmental, and cultural conditions. They developed a model that explains the determinants of health and the factors that affect individuals' health in a simple way (Whitehead and Dahlgren, 2007).

According to Pellmer and Wramner (2007), the determinant of health is a model based on hereditary factors; individual lifestyle factors; societal and local networks; living and working conditions; and general socioeconomic, cultural, and environmental factors. At the societal level, health factors include a social community, appropriate housing conditions, recreational opportunities and to have a good environment. The overall national public health goal is to create societal conditions for good health on equal terms for the entire population.



Figure 1: A good and equal health- eight target areas illustrated from The Public Health Agency of Sweden (2021).

2.3 National public health objectives and target areas

The main goal of public health policy is to create conditions for good and equitable health for the entire population and to close the avoidable health gaps within a generation. The goal clarifies that the community takes responsibility, which requires joint and cross-sectoral work. Public health objectives apply to all actors in Sweden (i.e., regional, state, and municipal).

The target areas identify the health determinants (i.e., factors that influence the health status of the population), such as the individual's education, work, environment, childhood, and upbringing. These determinants can negatively or positively affect health by increasing or decreasing the risk of ill health (Government Offices, 2018). The Swedish government policy contains eight general goals for public health to be achieved. Each goal addresses a different determinant of health and describes the factors that affect people's health (Government Offices, 2018).

This study includes five of these objectives. Goal two pertains to developing people's skills and knowledge through education to achieve good health. Goal three addresses work and work environment; if the individual works, then they have better health than

those who are unemployed, so it is important to improve this area. Goal four focuses on having income and opportunities for the individual to support them, which is a key factor that determines social differences in health. Goal five focuses on accommodation and neighborhood, which is considered as an important factor component of good and equal health. Goal six focuses on lifestyle habits, which are an important factor in good health. Many of the prerequisites for good health are affected by living habits and by the individual's own choices and lifestyle (Government Offices, 2018).

Mental health should be promoted by, for example, strengthening the individual's self-esteem. Security and togetherness are important to promote social support and prevent loneliness or depression. Promoting mental health supports achieving good health so that the individual engages in meaningful employment and has a high self-esteem and a feeling of control in their life, which supports mental health (Prop. 2017/18:249).

The structural or organizational level can help strengthen a person's mental health by preventing discrimination and inequality. The actors responsible for the health promotion efforts include the social unit, psychologists and counselors, and the health care system. These actors and arenas can provide support and help as well as counseling to individuals with mental health issues (Prop. 2017/18:249).

2.4 Mental health determinants

The level of mental health a person has at any given time is influenced by various biological, social, and psychological factors. Low socio-economic status and violence are some of the risk factors that can lead to mental health issues. This health problem can be attributed to health inequalities among groups, such as poor living habits, long-term adaptation difficulties they face in the new country, and social exclusion (WHO, 2018). These factors may lead to the prevalence of mental illness among foreign individuals (WHO, 2018).

People who experience trauma before or after moving to a new country are prone to experiencing mental health issues, such as depression and anxiety. Additionally, Post-traumatic stress disorder (PTSD) is a common mental disorder among refugees (Giacco & Priebe, 2018).

Exclusion, difficulties with income, and individual experiences of war trauma are risk factors for mental illness (Bettman et.al, 2015). People fleeing war often experience traumatic events such as torture, imprisonment, violence, and oppression (Rostila & Toivanen, 2012). This could result in individuals not seeking help from social services or psychiatrists. Social services serve to support people who cannot satisfy their needs and are entitled to financial assistance. Financial assistance is granted to strengthen the individual's ability to live on their own. Social services thus have an important role in identifying people who suffer from mental illness and referring them to appropriate interventions and support measures based on their needs (The National Board of Health and Welfare, 2009).

2.5 Refugees and their mental health in Sweden

According to a Statistics Sweden (2020a) report, 2,019,733 refugees live in Sweden, most of whom are foreign nationals. The number of refugees is expected to increase annually. Studies have shown that foreign individuals have higher mortality rates and poorer health compared to native-born people (e.g., Giacco & Priebe, 2018). However, not all foreign individuals have poorer health. The fact that some of these individuals have poorer health may be due to socioeconomic vulnerability and inequality between different groups in a population e.g., work, education, and income level (Pellmer et al., 2012; Rostila & Hjern, 2012).

Refugees' experiences of marginalization and discrimination may reduce their expectations in relation to integration, which is also a problem that may lead to an increased incidence of psychosis (Tinghög et al., 2016). Many refugees experience problems integrating into the new society and feel instability due to language barriers, cultural differences, exclusion, loneliness, and unemployment. Unemployment may lead to early death, impaired health, and sick leave. Clear links exist between unemployment and mental health in terms of the individual feeling stress, depression, psychosomatic symptoms, insomnia, and mental illness (Rostila & Toivanen, 2012). Exclusion, difficulties with income, and individual experiences of war trauma are risk factors for mental illness (Bettman et.al., 2015).

2.5.1 Socioeconomic status

This study employs the definition by Rostila and Toivanen (2012) that describes socioeconomic status as income, work, and level of education. The individual's understanding and skills can be measured and used as an indicator of socioeconomic status (Galobardes, Shaw, Lawlor, Lynch & Smith, 2006). Education level is divided into three levels: primary, upper secondary and post-secondary (Public Health Agency, 2016; National Board of Health and Welfare, 2013). The individual's level of education may affect their ability to understand information about health and their opportunity to obtain proper health care and medical care (Galobardes et al., 2006).

Education can affect the individual's ability to hold a job and to earn an income, as a higher level of pay often requires obtaining a higher level of education (Public Health Agency, 2016; National Board of Health and Welfare, 2013). A stable and high-income level can allow one to afford healthy food and activities, which can affect their health. A high income may also improve one's self-esteem (Galobardes et al., 2006).

Moving to a new culture can lead to an individual being exposed to stressful situations, which can affect their self-image and cause insecurity and anxiety. Longer acculturation can also have detrimental effects on mental and physical health. The loss of one's social network is a major concern for people moving to a new country. The first year in a new place can lead to psychological stress. It is therefore important for people to adapt quickly to their new surroundings. Many new refugees have problems adjusting due to factors such as language issues, cultural differences, and loneliness. Language problems can also lead to individuals withdrawing from the new society and experiencing depression and isolation (National Board of Health and Welfare, 2013).

2.5.2. Social exclusion and social capital

Factors such as social exclusion may have a negative impact on mental health. For example, depression is common among refugees who have lived in the host country for

more than five years. The reason for this may be a poor socioeconomic situation. In addition, unemployment can have an impact on a person's ability to assimilate into a new environment (Priebe, Giacco & El-Nagib, 2016).

Social capital refers to the networks of people within a certain society. These relationships allow the society to function properly. Social capital may explain health risks in social groups, but empirical evidence for it is lacking. Studies have shown that social capital is essential for the health of people who immigrate to other countries. Social norms that are entrenched in a high-income society give rise to a higher level of trust between people and a lower level of violence than in a low-income society. Refugees often come from countries with non-functioning social capital (Johnson, Rostila, Svensson & Engström, 2017).

2.5.3 Relevance for health-promoting working life

Sweden emphasizes a healthy work-life balance, with a focus on reasonable working hours and leave entitlements. Flexible working arrangements, such as flextime and telecommuting, are encouraged to help employees balance their work and personal lives. This flexibility allows individuals to adapt their work schedules to their specific needs and preferences (Naidoo & Wills, 2016).

Employers are responsible for providing a safe and healthy working environment, conducting risk assessments, and implementing measures to prevent work-related injuries and illnesses (Naidoo & Wills, 2016). In Sweden, workers are often involved in decision-making processes and are encouraged to participate in their work environment. Employers are also expected to create opportunities that will benefit their employees' well-being. There are many workplaces in the country that have a work environment that is ergonomic and conducive to employees' mental and physical health (ibid.) Social workers are responsible for delivering human-centered interventions. These are designed to improve the well-being and protect the individual's health. The National Board of Health and Welfare strives to standardize human rights organizations to facilitate this work (Skillmark, 2018).

Organizations promote health and prevent ill health through a functional context that helps to maintain employees' well-being (Naidoo & Wills, 2016). A workplace with a social system can enhance or decrease health. For example, a supervisor who implements preventive measures for their employees' health can have an effect on the individual's general well-being. This can also prevent sick leave and inability to cope with the stress of social work. It can also provide economic benefits, as employee sick leave can entail large costs for employers and society (ibid).

One of Sweden's national goals regarding improving working life is to reduce workplace stress, enhance employee well-being, and promote inclusivity; it encompasses physical, mental, and social work environment factors. Employment conditions, security, recovery between shifts, opportunities for training, and personal development and learning are also part of the target area. Promotional efforts in these areas would result in increased control, participation, and influence over the individual's work situation, resulting in improved health and public health (National Institute of Public Health, 2011).

A prosperous workplace affects people's health even outside of work. Early intervention improves opportunities to promote people's physical, mental, and social health and creates conditions to apply the employees' experience and knowledge. By giving employees support and room to control their work situation, a great opportunity is created to improve their health and well-being (Eaves, Gyi & Gibb, 2016).

3. Theoretical framework

3.1 Social-Ecological Model

This study uses the social-ecological model to discuss its findings on foreign mental health and the factors that influence refugees' mental health. The social-ecological model developed by Uri Bronfenbrenner is divided into four stages: microsystems, mesosystems, exosystems, and macrosystems (Bronfenbrenner, 1996). The model is based on a compilation of cultural, economic, biological, social, ecological, and political aspects that influence the individual's decisions. The model also provides an

understanding of the factors that affect the individual's behavior and presents a form of guidance to be able to develop a health promotion work through the presented social environments (Bronfenbrenner, 1996).

The first stage is the microsystem, referring to the individual and the settings in which they interact, such as family, school, work, and society. At the individual level (Microsystem), an exploration of factors is undertaken, encompassing elements like trauma history, pre-migration experiences, acculturation stress, and coping mechanisms. This examination includes an assessment of personal characteristics, mental health literacy, and patterns of help-seeking behaviors (Bronfenbrenner, 1996).

The second stage, mesosystem, has a significant impact on an individual's health and behavior. The mesosystem is closely connected to smaller systems like home, school, family, and friends. The connections someone forms in these places are what we call social capital. Social capital affirmation means having strong connections with others, where there's mutual support. Building trust in neighbors or groups is an example of bridging social capital (Putnam, 2000). The Mesosystem looks at how family, friends, and community relationships affect mental health. It involves understanding the roles of cultural and family expectations and figuring out how relationships with others impact things that cause stress or provide support for well-being (Bronfenbrenner, 1996).

The third stage is the Organizational Level (Exosystem) refers to the broader environment, including the places and people associated with a parent's or an individual's workplace. Social capital can have both positive and negative effects within this context. It assesses the accessibility and quality of mental health services for refugees in Sweden. Consider how workplaces, schools, and community organizations influence mental health, taking into account both supportive systems and potential stressors (Bronfenbrenner, 1996). Stage four is macrosystem level includes factors such as social and cultural values in society, as well as the political and economic systems in the country. This system is more distant from the individual compared to the previous systems (Bronfenbrenner, 1996).

The social-ecological model thus helps to describe the complexities of mental health among foreign groups in this study. Furthermore, the model describes the relationships between individual factors that affect the individual's mental health, including the stages of the system. The ecological model provides a broader insight and explanation of how these factors affect a person's mental health (Bronfenbrenner, 1996).

The social ecological model was chosen because it provides a possible explanation for those factors that can affect a refugee's life for example, their access to various resources such as education and jobs, which in turn can have an impact on their health behavior and decisions. This model is used to increase the understanding of being a refugee and the impact on the mental health of those living abroad by studying the relevant and accessible research. The model (SEM) theory is also relevant for professionals in social work, as social workers, for example, always have to take into account the environment and systems surrounding the client (Larsson & Sohlberg, 2014).

4 Methodology

This chapter describes the design of the study, including the strategy, article selection, and data extraction. A scoping review was conducted to attain the necessary information. According to Arksey and O'Malley (2005), the scoping review is an opportunity to summarize the literature on a topic and identify gaps in knowledge. This method is useful in gathering information that is relevant to the study's research questions. Scoping reviews are typically conducted to gather large numbers of studies. They do not evaluate the quality of the submitted articles (Arksey & O'Malley, 2005).

4.1 Overview of the selected articles

To answer the purpose and questions of the thesis, scientific articles were selected methodically during the literature search. The author of this study chose several articles from the beginning in which these articles contained information about mental illness among refugees.

The population in this study consists of refugee groups from different countries with conflicts who have consequently come to Sweden (Hjern & Ascher, 2018). Two studies focused on refugees from Iraq who settled in Sweden (Lecerof, Stafström, Westerling & Östergren, 2016; Siddiqui, Lindblad & Bennet, 2014). In addition, in two studies, the study population contained refugees from Syria who resettled in Sweden from 2011 to 2013 (Gottvall, Vaez & Saboonchi, 2019; Tinghög, Malm, Arwidson, Sigvardsdotter, Lundin & Saboonchi, 2017).

There is also a study on refugees from the Middle East and North Africa, Africa south of the Sahara, Eastern Europe and Russia that compared these refugee groups with native Swedes (Hollander, Dal, Lewis, Magnusson, Kirkbride & Dalman, 2016). Other studied groups were refugees from sub-Saharan Africa (Steel, Dunlavy, Harding & Theorell, 2017) and Kurdish refugees in Sweden (Nabi, 2014).

Sundsvall, Tidemalm, Titelman, and Runeson & Bäärnhielm (2015) compared refugees who were asylum seekers to non-asylum seekers in Sweden. The remaining six studies were on refugees in Sweden compared to native-born Swedes (i.e., works by Brydsten, Rostila & Dunlay (2019); Di Thiene, Alexanderson, Tinghög, and Torre and Rutz[2015]; Helgesson, Tinghög, Niederkrotenthaler, and Saboonchi & Mittendorfer-Rutz[2017]; Johnson, Rostila, and Svensson and Engström [2017]; Johnson-Singh, Rostila, Ponce de Leon, and Forsell and Engstrom [2018]; and Niederkrotenthaler, Wang, Helgesson, Wilcox, Goud, and Mittendorfer-Rutz[2017]).

4.2 Study design: Scoping review

A scoping review is an overview survey that aims to provide a clear picture of the studies that exist in an area (Arksey & O'Malley, 2005). The method can be used as part of the process of a literature review study, as it provides the opportunity to include a wide range of both quantitative and qualitative scientific articles (Arksey & O'Malley 2005). To achieve the research objective, answer the research questions, and gain a broad understanding of refugees' mental health in Sweden, a scoping review is conducted. According to Arksey and O'Malley (2005), the scoping review examines relevant literature on the topic, summarizes empirical research, and identifies terms and

knowledge gaps for future research. This method was therefore appropriate for gathering existing evidence that is relevant to this study's research aim and questions.

This study uses the method scoping review, in case new themes arise in addition to the scientific articles, and because scoping review provides the opportunity to identify areas that require more scientific studies (Arksey & O'Malley, 2005). The scoping review is suitable for emerging research areas, as it allows the researcher to explore and reveal the background of the literature based on a specific question of interest. In addition, the scoping review is intended to collect a large number of studies and does not evaluate their quality. This study uses Arksey and O'Malley's (2005) five-step model of scoping reviews as described below in 4.2.1 to 4.2.5.

4.2.1 Identify research question

This study's research questions are identified as described in 1.3; "What factors have contributed to the prevalence of mental illness among adult refugees in Sweden?

What health promotion measures in the labor market help to decrease the likelihood of mental illness among adult refugees in Sweden?"

4.2.2 Identify relevant studies.

The author of this study searched for articles in various databases, such as Scopus, Applied Social Sciences Index and Abstracts, and Social Services Abstract from the University of Gävle. The search strategies identified published studies that address the impact of refugees' mental health. The author of this study received recommendations and guidance from the Mälardalen University librarian to use the databases such CinahlPlus, Medline, and APA PsycInfo because these databases make the scoping review method more convenient and broader. To obtain relevant studies, the author of this study conducted a so-called "block search," where different blocks containing different terms are combined using Boolean operators (Arksey & O'Malley, 2005).

Block 1 was checked for keywords "mental disorder" OR "psychiatric illness" (Swedish* AND "refugees*OR refuge*" AND factor* OR "psychosocial factors" *).

Block 2 was for the keywords “labor market” and “prevention.” In addition to these keywords and the aforementioned databases, I used the reference lists in peer-reviewed scientific articles, the Swedish Statute Book, the scientific literature, as well as reports from the Swedish labor market, the Public Health Agency of Sweden, and reports from the WHO.

4.2.3 Inclusion and exclusion criteria

The search for articles and the screening for the relevance of identified articles was implemented through setting the inclusion criteria selection at the abstract, title, and full-text levels. When a scoping review was chosen, inclusion and exclusion criteria were developed to reduce articles that are linked to the study questions and exclude unrelated studies.

The number of articles identified through Medline, Cinahl Plus, APA PsycInfo, and other databases was 298. These articles were moved to the reference managing tool, EndnoteX9 online, which organizes the references and removes unrelated and duplicate studies; 97 articles were automatically excluded. The major inclusion criteria for this research were that the articles would be published between February 2014 and April 2020 to attain as much current evidence as possible. An earlier study reviewed the same topic, sample, and country in 2014 (Gilliver et al., 2014).

The language of publication was another criterion because all integrated articles were written in English, and articles written in Swedish do not exist in the used databases. Articles written in other languages could not be translated into English due to the time limit of this study. The study emphasizes understanding and gaining knowledge about which factors affect mental illness among refugees, and the selected studies included individuals from 16 years of age and above. Studies that included younger children or adolescents were excluded, as were studies where all populations were examined.

Last, studies conducted in Sweden on the prevalence of mental health and factors that affect mental illness among refugees were included. The author of this study focused on studying the summary or abstract of the remaining articles to determine whether it was possible to identify a theme, the full text was then read. The knowledge search

ultimately resulted in 11 articles that were considered relevant to the problem area. The discarded scientific articles in the study had no connection to its main concepts or had poor measures of credibility and quality. Some of the articles relevant to this study were not available. Table 1 presents all inclusion and exclusion criteria in the study.

Table 1. Inclusion and exclusion criteria

Inclusioncriteria	Exclusioncriteria
Articles published from 2014 (Feb)	Articles published before 2014.
Population "adult refugees"	Other populations having other sickness than mental disorders or are under 16 years old.
Studies: Among both Swedish and other countries.	Studies exclusively carried out outside Sweden.
Published: in English.	Published in other languages than English.
Peer Reviewed: Available full text.	Not peer reviewed. Not available full text.
Empirical study design (qualitative, quantitative, mixed method)	Not just a study design.
Studies examining mental health of refugees and refugees communities	Studies that investigate mental health and not focusing on refugees.

4.2.4 Charting the data

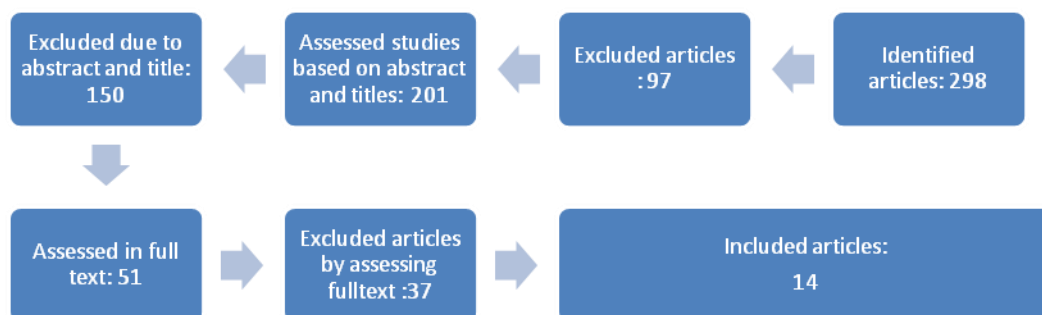
Abstract and title level

After removing the unrelated articles, 201 articles remained. After screening the abstract and title, 150 additional articles were excluded. At this step, articles were omitted if they addressed other topics “for example” studies that were conducted outside of Sweden, studies that did not investigate mental health among refugees, and studies that did not focus on the general health among refugees living in Sweden.

Full-text level

After the author of this study screened the abstract and titles, 51 articles remained to be assessed in full text. At this step, all aforementioned criteria were considered. The author of this study excluded articles that did not relate to the study aim and studies with participants who were adolescents and children. The 35 articles that were not available in the full text were also excluded. At this stage, the author of this study manually checked reference lists to view the included articles and their published date to determine if they were relevant. Finally, 14 articles were chosen that fit the aim and study questions of this scoping review (Figure 1).

Figure 1. Flow chart of study identification, inclusion and exclusion criteria



4.2.5 Organizing and summarizing the data.

Data extraction

To review and analyze the 14 articles, the author of this study conducted a content analysis, which in practice refers to an analysis of recurring concepts that are interpreted with a focus on similarity and differences. Significant data was collected from these 14 articles and compiled into categories and subcategories (Bryman, 2015; Arksey & O'Malley, 2005).

A content analysis must describe how the chosen knowledge was summarized and analyzed. Considering the purpose of the scoping review, the author of this study attempted to attain a clear picture of the material and create a structure to review the articles, as per Bryman (2015). It is possible to use both the word categories and theme, according to both Bryman (2015) and Friberg (2012). The author of this study therefore used concepts, categories, and themes. Furthermore, Bryman (2015) notes that the analysis section of a knowledge overview differs from analysis in quantitative (observation) or qualitative (interview) studies.

The author of this research read these articles several times to develop in-depth knowledge of the content as suggested by Friberg (Friberg, 2012). The articles were subsequently summarized, and significant text units were highlighted. The author of this study compared the articles and identified patterns, relevant content, and concepts. The data from the selected articles was charted through a well-recognized protocol recommended by Arksey and O'Malley (2005). Key information about the articles was included such as author, country and publication year, purpose of the study, population, research design, result, and conclusion (see Appendix 1.)

Data analysis

The author of this study began to investigate the data from the articles, when information from the included articles was charted in the extraction protocol. The investigation of the data was executed by taking notes and summarizing the results. Overviews of the 14 articles were recognized; this includes the broad information about

the articles (see Appendix 1), and similar information from the articles was grouped into categories. This was made by grouping related information about varied aspects of mental health and factors that affect refugees' mental health and the developed topics to answer the research questions.

One main theme, *Factors contributing to mental illness*, and six subsequent sub themes were suitable to answer the first research question; these themes were organized by grouping repeated information about mental health from various articles. These subthemes were *depression and anxiety*, *Post traumatic stress disorder*, *psychosis*, *suicide*, *social capital & socioeconomic status*.

The other main theme, *Health Promoting measures*, and two subsequent subthemes, *health promoting factors* and *interventions* were identified that were relevant to answering the second study questions.

4.3 Validity, reliability and generalizability

To enhance the validity, reliability, and generalizability of the scoping review study, researchers should follow rigorous research practices, clearly define their research questions and criteria for selecting and analyzing sources, provide a transparent and replicable methodology, and discuss the limitations of their study. Additionally, conducting more primary research studies in different populations can help further establish the generalizability of the findings.

4.3.1 Validity

Validity refers to the extent to which the examiner measures what is intended to be measured. There are two parts of validity: internal and external. The internal aspect pertains to whether the study corresponds to reality and whether or not the conclusions it draws are credible. External validity pertains to whether the results of a study can be generalized (Grinnell & Unrau, 2011). In a scoping review study, validity can be achieved by conducting a systematic and comprehensive search of literature, using appropriate inclusion and exclusion criteria, and ensuring that the findings accurately represent the existing literature on the subject which the author conducted step by step

in this study. The authors of the analyzed studies used various triangulation forms to increase the credibility of their studies.

4.3.2 Reliability

Reliability refers to the consistency and stability of the study's findings or results. In a scoping review, reliability can be enhanced by following a transparent and replicable methodology and clearly documenting the search strategy, article selection process, data extraction, and analysis procedures. To enhance the reliability of this study the author provided detailed steps and documentation, other researchers can replicate the study and determine if similar results are obtained.

4.3.3 Generalizability

Generalizability refers to the extent to which the findings or results of a study can be applied or generalized to a larger population or different situations. It assesses the external validity of research and indicates how well the conclusions can be extended beyond the specific conditions of the study (Grinnell & Unrau, 2011). Studies and data on the mental health of adult refugees in Sweden provide valuable insights, but it's crucial to remember that individual experiences can vary greatly. Each refugee's circumstances, background, and cultural influences may impact their mental health outcomes.

Additionally, generalizability may be limited by factors such as the specific sample size, demographic characteristics, and the methodology used in the research. Therefore, while findings about mental health among adult refugees in Sweden can inform understanding, it's important to recognize that they may not universally apply to all refugees or other geographical contexts.

4.4 Ethical aspects

In a scoping review, ethical considerations are not relevant in the same way as in qualitative and quantitative research. The researcher using secondary data must nevertheless be critically aware of how these scientific papers relate to the credibility strategies. Ethical considerations in this study may also concern the presentation of the

result, as quotations in the results section can reinforce the ethical aspect (Aveyard, 2010).

It is of great importance to ensure that ethical principles were maintained for the selected studies since a knowledge study does not handle its own population, but rather makes use of other research results. The four general ethical principles presented by the Swedish are the information, consent, confidentiality, and use requirements (Swedish Research Council, 2017). The information requirement is that the researcher is obliged to inform the participants about the research purpose, the conditions for their participation, and the role they have in the project (Swedish Research Council, 2017). These four principles are important for ensuring the confidentiality around the participants (Bryman, 2008).

Since the author of this study chose to do a scoping review, the author did not face any specific research ethics problems, because the author didn't take any interviews, but it is important in such a study to integrate ethical considerations during the selection process and when the results are presented. I selected scientific articles and checked that an ethical review board in each country had undergone ethical consideration before the research permit was given.

The purpose of this study, considering ethical considerations, was to present the results in a correct and objective way (Kalman & Lövgren, 2012). Throughout the course of the work, the author of this study attempted to avoid transforming or distorting the articles' content. Although the author didn't write off the articles' content, he tried to provide an overview of current knowledge about mental illness and connect the gap between it and the literature.

The author in a study of knowledge is obliged to ensure the ethical aspect, to avoid ethical issues in the research (Bryman, 2008). The author of a knowledge study should objectively describe the method and results of the study they are conducting and avoid expressing their personal values. To meet these requirements, in this study the authors of the analyzed studies was careful not to hide the facts due to their own opinions (Bryman, 2008)

5. RESULTS

The scoping review assessed the literature on the prevalence of mental illness and factors that affect adult refugees in Sweden. Also, it was assessed the importance of health promotion measures in the labor market. Thus, this chapter will present main themes and subthemes that have emerged in the articles.

This chapter is divided into two main themes: *Factors contributing to mental illness* (5.1) and *health promoting measures in the labour market* (5.2). The first main theme contains four subthemes: *depression, PTSD, psychosis, suicide, social capital, and socioeconomic status*. The second main theme contains 2 subthemes: *health promoting measures* and *interventions*. Each main theme is followed by a brief analysis which will be further expanded upon in chapter 6. Discussion.

5.1 Factors contributing to the prevalence of mental illness.

5.1.1 Depression and anxiety

Depression and anxiety among refugees are known to vary greatly between populations and studies. Several studies have shown that the outcome of depression and anxiety are related to both pre- and post-migration phases. During the pre-migration stage, anxiety and depression are often linked to severe trauma and PTSD. Mental health problems can also develop during the post-migration period due to different stressors and difficulties (Tinghög et al., 2017).

Tinghög et al.'s (2017) cross-sectional study on the refugee population in Sweden, especially on Syrian refugees, measured the outcome of their anxiety and depression. The study involved 1,215 people between the ages of 18–64 who had been granted a residence permit in Sweden. Depression was the most common type of mental illness among this escape in group with 40% (95% = confidence interval [CI] 37% to 43%), followed by anxiety with 32% (95% CI 29% to 34.7%). The experiences of refugee families and individuals were known to be more prone to experiencing stress and violence after the pandemic (Tinghög et al., 2017).

Another cross-sectional study with undocumented refugees ($n = 104$) was conducted in three large cities in Sweden between 2014 and 2016. It aimed to analyze the mental health of undocumented refugees and found a high number of participants experiencing severe anxiety (68%) and depression (71%). These high numbers were related to fear of returning to their homeland for political reasons and due to belonging to a minority group, as the individuals were concerned about the war and harassment occurring in their native countries (Andersson et al., 2018).

According to a study by Steel et al. (2017) 420 refugees from different backgrounds in the same location and conducted with the same method was studied and the results indicated a higher rate of anxiety and depression in the studied population. It was reported that 20% of the participants had clinically significant depressive symptoms. Furthermore, women had poorer health than men and had a higher incidence of depressive symptoms. In its regression analysis, the study noted problems associated with depression and anxiety during the post-migration phase (Steel et al., 2017).

In addition, a cross-sectional study was conducted of individuals living in Malmö who were aged 30–75 years; they were examined by depression and anxiety when comparing refugees from Iraq with native Swedes ($n = 634$). Depression was five times greater and anxiety three times as widespread among Iraq refugees compared to native-born Swedes. Refugees from Iraq had poorer health and were three times more likely to become ill compared to Swedes (Siddiqui et al., 2014).

Another study was conducted on how pre-and post-migration factors affect the mental health of Kurdish refugees in Sweden. The results indicate that their mental health was associated with factors that occur before, during, and after migration. The participants reported being afraid, having anxiety about the future, and experiencing feelings of powerlessness (Nabi, 2014).

5.1.2. Post-traumatic stress disorder (PTSD)

Post-traumatic stress disorder (PTSD) is a mental health problem related to a situation in which a person experiences or witnesses a traumatic event. This occurs because refugees experience traumatic events in their home country. These experiences may take longer to heal after the refugees have settled in the new host country. Furthermore, refugees may suffer from PTSD after they have arrived and settled in the new country. A cross-sectional study by Tinghög et al. (2017) examined the mental health of Syrian refugees between the ages of 18–64. Approximately 30% of participants reported that they had been subjected to torture, and those participants who experienced torture have a nearly three-time higher risk of having PTSD symptoms. According to the study, PTSD reactions can remain in the person and increase with overtime after war trauma and the resettlement period.

Another study by Gottvall et al. (2019) describes the relationship among social support, exposure to torture, and PTSD among Syrian refugees who settled in Sweden ($n=1215$). This research reveals a higher average occurrence of PTSD. In addition, this survey finds that the groups exposed to torture were more than two and a half times more likely to suffer from PTSD than the participants who were not exposed to torture. In addition, groups with less social support are more likely to suffer from PTSD (Gottvall et al., 2019).

A study by Steel et al. (2017) assessed PTSD symptoms among fugitives who have experienced war events, trauma before migration, and stress after migration, as well as the psychological consequences of refugees mainly from Africa south of the Sahara who came to Sweden ($n=420$). The study used the Harvard Trauma Questionnaire, which showed that 89% of participants reported having experienced a traumatic event before emigration and 47% of participants reported clinically significant PTSD symptoms. The male participants reported having a significantly higher number of traumatic experiences and stress after migration compared to women. Most of the survivors who experienced traumatic life events were linked to combat and torture, as well as the loss of loved ones (Steel et al., 2017).

A study also examined indicators of social inclusion from 2011–2015 in western Gotland and described psychic inequalities between foreign- and native-born people. The indicators included trust in others, social activities, and social support. Low levels of social activity were reported by 20%, social support by 16%, and trust in others by 17% of the studied refugees. Low trust in others leads to mental health gaps between native- and European-born, which were 9% and 17%, respectively. Those who were native-born and those who were not European born reported feeling unseen (10% and 19%, respectively (Brydsten et al., 2019).

Another related study examined the link between people from different ethnic backgrounds, psychological distress, and social capital in Sweden. The material was collected from participants aged between 18–64 via 2002, 2006, and 2010 public health cohort surveys in Stockholm. The study results found no differences in this relationship that applied to the measures of ethnic background. The researchers noted that certain factors such as social capital, trust, and social inactivity can explain how an emphasis on objectivity or realism leads to a higher risk of mental illness among individuals with certain ethnic backgrounds (Johnson Singh et al., 2018).

Other international studies have compared the increase in PTSD in refugees and revealed that PTSD was a common occurrence in refugees from Cambodia and former Yugoslavia who settled in the United States. Difficulties that affect a person in relation to the individual's family or work have the greatest impact on the person's health, since the militia can influence the individual's behavior (Bronfenbrenner, 1996).

Post-traumatic stress disorder has caused refugees from sub-Saharan Africa to experience difficulties such as social and economic issues linked to discrimination, family, working conditions, and finances (Steel et al., 2016). In the social-ecological model, discrimination against refugees is based on stereotypes, which can affect how the native-born treat refugees. These problems are understood as parts of exosystem in the social-ecological model (Bronfenbrenner, 1996). The results of this literature review suggest that depression and anxiety are common in refugees living in Sweden.

These results are linked to how Gilliver et al. (2014) describe the risk of increased depression and anxiety as common among refugees in Sweden. In the social-ecological

model, the problems regarding depression and anxiety found in the studied research are described at the Microsystems and Macrosystem levels. Clearly, the results of these systems are often linked to steps both before and after migration. Tinghög et al. (2017) convey that refugees from Syria living in Sweden have an increased frequency of depression and anxiety and that those exposed to stress and violence after migration has an increased risk of depression and anxiety. If the individual has undergone personal violence before migration, then it can be understood on the Micro level in the social-ecological model, as violence affects the individual as a person depending on where the individual has been.

5.1.3 Psychosis

The most common mental disorders are depression and anxiety, which can develop into psychotic disorders. The prevalence of psychosis among refugees in Sweden was noted, for example, one study by Hollander et al. (2016) based on cohort study of 1.3 million people in Sweden. The researcher examined whether refugees are at elevated risk of schizophrenia and other psychotic disorders compared to the Swedish-born population. The refugees came from North America, sub-Saharan Africa, Asia, the Middle East, Eastern Europe, and Russia. The study showed 3,704 cases of non-affective psychotic disorder; refugees were at increased risk of psychosis compared to both the Swedish-born population (adjusted hazard ratio [HR] 2.9, 95% CI 2.3–3.6) and non-refugee refugees (HR1.7, 95% CI 1.3–2.1; Hollander et al., 2016). There is evidence of a higher rate of psychosis among refugees conducted a cohort study in Stockholm County, where the material was collected from participants aged 18–64 in 2002, 2006, and 2010. The study examined the connection between psychological distress and ethnic backgrounds, which can increase the risk of psychosis.

The analysis showed that a 10% increase in ethnic density or diversity was related with the prevalence of psychological distresses (Johnson-Singh et al., 2018). A further cohort study related to the rate of psychosis analyzed by Johnson et al. (2017) regarding refugees's status on psychological distress compared to Swedish-born. This study included 50 498 individuals from Stockholm County in 2002, 2006 and 2010. The researchers measured mental illness that increases the risk of psychosis, and the results showed that many refugees had higher odds of mental illness compared to Swedish-born

people. Male refugees had higher rates of mental illness than Swedish-born men (Johnson et al., 2017). Another common mental disorder among refugees living in Sweden is psychotic disorders. The study's results demonstrated that many refugee groups faced a higher risk of non-affective psychotic disorders than the Swedish-born. Refugees are two to three times more likely to suffer a psychotic disorder than native Swedes. This can lead to a reduction in life expectancy by approximately 10 to 25 years (Hollander et al., 2016).

It aligns with the results of Gilliver et al. (2014), which indicated that psychotic disorders were more common among refugee groups than native Swedes. This can be explained by their differences in social determinants of health and the repeated exposure to factors such as substance abuse, trauma, social isolation, discrimination, and socioeconomic problems. Other research has also shown a higher frequency of psychosis among refugees, and mental illness can lead to and increase the risk of psychosis. These studies indicated that refugees had a higher risk of mental illness than Swedish-born groups (Johnson et al., 2017; Johnson-Singh et al., 2018). The results of this study show that there is a high risk of mental illness (e.g., depression, anxiety, PTSD, and suicide) in refugees living in Sweden compared to the Swedish-born population. Multiple factors influence refugees' mental health, including social capital and socioeconomic factors (e.g., income level, employment, and social support).

5.1.4. Suicide

Suicide is a preventable public health problem. Prevention pertains to reducing the risk of suicide through various interventions. Several studies have shown that 95% of individuals who commit suicide have a mental disorder, such as schizophrenia, depression, PTSD, or anxiety (Tinghög et al., 2017). People suffering from mental illness often experience loneliness or isolation, which can lead to and correlate with suicide. The suicide rate is higher among foreign-than Swedish-born people. Suicide risk has been studied in people with first- and second-generation foreign-born backgrounds compared to native-born people (Di Thiene et al., 2015).

A cohort study involved 4,034,728 people who were followed from 2005 and 2010. Suicide was lower in first-generation refugees and higher among second-and middle-

generation refugees compared most closely with native Swedes (Di Thiene et al., 2015). Another study compared 88 asylum seekers with 88 people who were not asylum seekers who attempted suicide in Sweden. The risk of suicide attempt was higher among those who were asylum seekers than the control group. The study conveyed that the severity of the suicide attempt was higher for the asylum seekers. The suicide attempt for asylum-seeking people was associated with their previous experiences and vulnerabilities (e.g., torture and PTSD) that depended on their asylum process and the decisions they received from migration (i.e., whether it was negative or affirmative; Sundvall et al., 2015).

5.1.5 Socioeconomic status

In Sweden, socioeconomic inequalities among populations may negatively affect the mental health of refugees who settle in the country (Helgesson et al., 2017). A low socioeconomic status is associated with poor mental health. Several studies have investigated the relationship between economic difficulties, mental health, and housing problems among migrants in Sweden. Poor mental health was linked to housing problems and poverty. In contrast, social determinants in the new country were important for refugees' mental health (Lecerof et al., 2016).

A cohort study by Helgesson et al. (2017) illustrated how economic and social factors affect refugees' mental health and studied the relationship between marginalization in the labor market and mental disorders. The study involved 1.7 million people aged 20–35 years and included both native Swedes and refugees. The results showed that refugees had a higher risk of unemployment than Swedish-born persons (Helgesson et al., 2017). Another qualitative study by Nabi (2014) studied the mental health of Kurdish refugees between the ages of 38–59. Those who had a higher level of education or profession at home were satisfied with their status and they also had better mental health. The researcher concluded that professional and social regression was associated with poorer health and self-esteem (Nabi, 2014).

Brydsten, Rostila, and Dunlay (2019) studied socioeconomic indicators such as economic differences and conditions of asylum and explained mental illness among native Swedes and foreign-born refugees in Sweden. The results illustrated the

downside of the labor market, exclusion from the labor market, economic shortages, unemployment, and economic difficulties experienced by refugees. Furthermore, the study's proposal was to improve the refugees' economic problems to reduce mental health gaps between natives and refugees living in Sweden (Brydsten, Rostila & Dunlay, 2019).

A cross-sectional study of undocumented (UM) adult refugees in Sweden regarding their living conditions, mental health, and access to human rights was also examined. The results showed a higher rate of depression (71%), anxiety (68%), and PTSD (58%) among the participants. Furthermore, the study shows that these mental disorders were related to socioeconomic factors, such as these participants having an unstable housing situation and precarious relocation. For instance, 57% experienced a lack of basic needs such as food insecurity that created stress among UM (Andersson et al., 2018).

5.1.6 Social capital

Social capital is another factor that can affect refugees' mental health. Social capital divides into three types: bridging, binding, and interconnecting. Previous research has found strong evidence that low social capital is associated with socioeconomic health inequalities and that social capital is an important aspect in mediating the effects of socioeconomic status (Brydsten et al., 2019; Lecerof et al., 2016). One of the included research projects conveyed that social capital is important when there are health inequalities in the population, especially regarding refugees.

Social capital mediated the effect of refugees' mental health status for different refugee groups compared to Swedish-born. The study participants were 50,498 individuals who were randomly selected people from Stockholm. The study measured their social capital with the benefit of bonding, bridging and the relationship of social capital. Social capital was the main mediator role for both male and female refugees. All three social capital types had a strong effect on the refugees (Johnson et al., 2017). Previous studies by Brydsten et al. (2019) and Lecerof et al. (2016) found strong evidence that low social capital is linked to socioeconomic inequalities in health and that social capital plays a specific role in mediating the effects of socioeconomic position.

In addition, studies have shown that social capital can play a significant role in the health inequalities between groups, especially among refugees. One study hypothesized that the presence of social capital can help mediate the effects of immigration on psychological distress among refugees groups. The study was conducted on 50,498 individuals from Stockholm County. The data collected from the participants was used to measure the participants' social capital and their bridging and bonding abilities. It was found that the presence of social capital was associated with the mediating skills of refugee and refugees women (Johnson et al., 2017).

5.1.7 Analysis of the first main theme, mental illness

In the following theme, findings from articles that concern the prevalence of mental illness and factors that affect adult refugees' mental health in Sweden are presented. Six sub-themes were emerged under this theme and these are: depression, anxiety, PTSD, psychosis, suicide, socioeconomic status and social capital.

As mentioned earlier in this article, Different databases were accessed and searches on the topic mental health were made. Most of the articles in relation to mental health pointed at the themes above. This part shows how the study's results were analyzed in accordance with the different themes. 14 articles were used to answer the study results.

The articles that were used to answer this theme are (Tinghög et al., 2017; Andersson et al., 2018; Steel et al., 2017; Siddiqui et al., 2014; Nabi, 2014). These articles highlight the fact that depression has increased amongst refugees. All articles were carefully and repeatedly read. Although only five articles out of the 14 were found suitable for answering the above theme. Several studies have examined the prevalence of depression among adult refugees in Sweden. These studies have shown that refugees are at a higher risk of experiencing depression compared to the general population.

Factors such as traumatic experiences before and during migration, separation from family and support networks, and the challenges of adjusting to a new culture and language contribute to the increased risk of depression among refugees. These articles pointed that the fact of anxiety disorders are also common among adult refugees in Sweden. The uncertainty and stress associated with the migration process, including the

fear of deportation and difficulties in accessing essential services, can contribute to the development of anxiety. Language barriers and cultural differences may also hinder access to appropriate mental health care, further exacerbating anxiety symptoms.

Articles analyzed in this study also mentioned pre-migration factors related to poor mental health. Traumatic events, war that forces people to flee their home countries, and violence are risk factors before migration that the articles examined. Many of these issues have been linked to PTSD, anxiety, and depression in refugees who settle in Sweden. Refugees may also experience various types of problems during the post-migration phase that can lead to mental health problems. Other post-migration experiences are common among refugee groups, such as discrimination, socioeconomic problems, and poor social support—which are linked to mental disorders (Lecerof et al., 2016; Nabi, 2014; Tinghög et al., 2017). A low socio-economic status is common among refugees living in Sweden.

Articles analyzed in this study mentioned psychotic disorders, such as schizophrenia, have been found to occur among adult refugees in Sweden, although the prevalence rates vary. Factors contributing to the development of psychosis in refugees include traumatic experiences, social isolation, and stress. Language barriers and cultural misunderstandings may complicate the diagnosis and treatment of psychotic disorders in this population (Hollander et al., 2016; Johnson et al., 2017; Johnson-Singh et al., 2018; Gilliver et al., 2014). The analysis showed that a 10% increase in ethnic density or diversity was associated with the prevalence of psychological distress (Johnson-Singh et al., 2018).

A further cohort study related to the rate of psychosis analyzed by Johnson et al. (2017) regarding refugees's status on psychological distress compared to Swedish-born. Psychological distress which increases the risk of psychosis was measured, and the result showed that refugees had higher odds of psychological distress than Swedish-born counterparts. The refugees male had significantly higher odds of psychological distress than Swedish-born male (Johnson et al., 2017).

Articles analyzed in this study also mentioned by Lecerof et al. (2016) described social capital as trust in others and social participation. Furthermore, it showed that trust in

other people can have a protective effect on mental illness regarding when they were exposed to, for example, financial deficiencies and housing problems. Social participation had a protective effect when individuals were subjected to discrimination. The study concluded that social capital and social determinants in the new country play key roles in refugees' mental health. Social capital can alter the effect of risk factors and be useful in minimizing the damaging factors for mental health among refugees (Lecerof et al., 2016).

5.2 Health promotion measures in the labor market

5.2.1 Health promotion measures that decrease the likelihood of mental illness

To improve the mental health of the population, efforts are needed to strengthen individuals, strengthen communities, and thereby reducing the likelihood the development of mental illness. It is important to increase the accessibility of housing, meaningful education, and work, as well as to provide support and assistance to those who need it. It is also essential to reduce poverty, discrimination, and inequality. The national public health policy can affect mental health conditions by aiming to create conditions for good and equal health in the population (Public Health Agency of Sweden, 2020).

Health promotion efforts also aim to strengthen people's physical, mental, and social well-being, for example through increased participation and strengthened confidence in their abilities. To develop health promotion efforts, knowledge is needed about health factors (i.e., as opposed to risk factors for disease). Interventions with a universal preventive approach are similar efforts that aim to promote health (Public Health Agency of Sweden, 2021).

One difference between preventive and health promotion efforts is that preventive efforts often focus on a more limited or specific problem picture or disease, while health promotion efforts have the goal of strengthening people's physical, mental, and social well-being (e.g., through increased participation and strengthened confidence in their abilities). Health factors in working life in relation to mental health include effective

leadership by a fair, inclusive, and supportive leader. Other health factors are control at work, a balance between work and leisure, clear goals, and job security (Public Health Agency of Sweden, 2021).

Unemployment, low income, and limited education are factors that affect an individual's mental health and play a role in social determinants of health inequalities. Evidence-based research suggests improving the work of refugees or migrants to reduce the incidence of mental health problems and to reduce the health inequalities and gaps between refugees and Swedes (Helgesson et al., 2017).

Being able to integrate refugees into their host communities is regarded as one of the key factors that can prevent mental disorders in a country. This can be done in various ways depending on the situation and the providers and agencies available in each region. Some of the most important principles that can be followed are access to work and a person-centered assessment of the needs of refugees. This can be done through close collaboration between social and health care services and the providers of employment opportunities. For children, school-based programs should also be considered. Being able to encourage volunteering or training refugees to become peer supporters can lead to various effective social integration projects (Helgesson et al., 2017). Initiatives are being implemented in Sweden that aims to increase trust and social inclusion among refugees. However, in 2017, it was reported that refugee participation is low in social integration, which reduces trust in other people.

Putnam (2000) describes creating trust in others and increasing participation in communities that are united by similar activities and share the same values. Sweden is known for its unity and for its tradition of supporting organizations that promote social ties. Being involved in refugee resettlement activities can help build trust between the host community and the refugees. It can be a way of prevention against the risk factors for mental illness. Economic and social factors can promote mental health in a sustainable way. A cohort study examined the association between unemployment and suicide attempts (Niederkrötenhaller et al., 2017). The study participants were European refugees and those who were not European refugees; they were compared to Swedish-born individuals. The study found that groups with refugees backgrounds had a higher risk for unemployment than natives. Non-European refugees had a higher risk of

suicide due to unemployment than other refugees and Swedish-born people (Niederkrötenhaller et al., 2017).

5.3.2 Interventions at the individual and organizational levels

There are opportunities to have both short- and longer-term effects on mental illness through efforts at the individual and organizational levels. At the individual level, short-term effects can be achieved through programs that focus on stress management, mindfulness, yoga, or meditation. However, it is unclear how long the positive effects will last (Public Health Agency of Sweden, 2021).

According to a study, refugees are more likely to have different needs and characteristics than other job seekers. They also face various obstacles when they seek work in their host country. For instance, mental health issues and the lack of social capital may prevent refugees from finding employment. Studies have shown that refugees are less likely to find work and are more prone to experiencing unstable contracts and lower income levels than other groups.

At the individual level, health promotion and prevention refer to strengthening the refugees and other individuals' ability to handle challenges and solve problems, which helps the individual to find a job and strategies to promote their own health and recovery, increase the individual's knowledge of mental health and becoming better at communicating about mental health (Public Health Agency of Sweden, 2021).

Efforts at the organizational level may lead to lasting improvement by changing the organization, routines, and processes so that they lead to less stress or other burdens. The effort can also be based on the workplace developing more participation with room for a continuous dialogue about changing and adapting the work situation. Conversations about mental illness in the workplace have also been highlighted by researchers to reduce stigma (i.e., negative attitudes, prejudices and discriminatory treatment; Public Health Agency of Sweden, 2021).

In public health work, the workplace is often less conducive to disease prevention and promotion than other areas. This is because the establishments rely on legislation and

regulations to set the standards for efficiency and profitability in their operations. A positive working environment can help attract and retain workers (Public Health Agency of Sweden, 2021). From an economic perspective, it is important to avoid sick leave and rehabilitation, for both the workplace and society. Increased cooperation between public health and human health professionals can in the long-term lead to a working life that includes preventive and health-promoting perspectives and measures as a natural part of their activities (Public Health Agency of Sweden, 2021). In addition to being costly to the system, mental illness has a significant negative impact on productivity. This issue can lead to reduced work ability and discrimination. Social workers and other actors are responsible for providing treatment and support to individuals with mental illness (Public Health Agency of Sweden, 2021).

The concept of protecting and improving the well-being of an individual is constantly changing. To facilitate this work, the Board of Health and Welfare has established a set of standards for human treatment organizations. In addition to individuals, organizations play a vital role in preventing ill health (Naidoo & Wills, 2016). A social service facility can contribute to the well-being of its employees. For instance, if a supervisor takes the necessary steps to prevent their staff members from getting sick, it can improve their general well-being. This helps to prevent stress and illness from affecting the employees. It also provides the society with economic benefits due to how sick leaves can be costly for employers (Naidoo & Wills, 2016).

5.3.3 Analysis of second theme, health promoting measures

The analyzed articles showed that even work plays an important role in everyone's life and can contribute to creativity, independence and people's well-being. However, unemployment or sick leave can have serious effects on health, both physically and mentally.

Articles analyzed in this study mentioned that psychological research according to Public Health Agency of Sweden (2021) has shown that difficult socioeconomic circumstances can lead to negative behaviors and unwanted reaction patterns, which have negative effects on mental and physical health. Without work, there is a lack of a sense of coherence, which contains the parts comprehensibility, manageability and

meaningfulness. These are of great importance for both better mental and physical health (Public Health Agency of Sweden, 2021).

It has also been shown that unemployed people and single parents with limited social support have a higher risk of suffering from both depression and suicidal thoughts and highlighted that being unemployed can also lead to having both less of a social network and limited contact with Swedish society. Many refugees state that a lack of social support can be a major negative factor in entering the Swedish labor market (Public Health Agency of Sweden, (2021).

Articles analyzed in this study mentioned that facilitating job opportunities and providing vocational training can foster financial stability, social integration, and a sense of purpose, which can positively impact mental well-being (Public Health Agency of Sweden, 2021). Implementing supportive workplace environments that cater to the mental health needs of refugees, such as access to counseling services and mental health resources, can contribute to maintaining positive mental health (Skillmark, 2018).

Promoting cultural sensitivity and diversity training in the labor market can ensure an inclusive and tolerant atmosphere, reducing discrimination and stigmatization that may affect the mental well-being of refugees. Social integration programs: collaborating with organizations to offer social integration programs can help refugees establish social connections, access vital services, and navigate Swedish society, all of which are crucial for mental health. Mental health promotion campaigns are also needed to raise awareness about mental health, combating stigma, and educating refugees about available support services that can encourage help-seeking behavior and early intervention (Public Health Agency of Sweden, 2021).

6. DISCUSSION

6.1 Results summary

This section presents a summary of the previous results and discusses the results. The purpose of this study was to summarize and map research conducted in recent years on refugees' mental health and to describe the knowledge gap for future researchers. To achieve this goal, this study asked two questions (see Section 1.3).

In accordance with these questions, the results of this study show that there is a high risk of mental illness (e.g., depression, anxiety, PTSD, and suicide) in refugees living in Sweden compared to the Swedish-born population. The study's results also show that social capital and socioeconomic factors (e.g., income level, employment, and social support) as well as supportive policies prevent mental illness and promote overall well-being.

6.2 Results discussion

In this section, the discussions consider the theoretical framework of this study (i.e., the social-ecological model) in relation to findings from the analyzed articles. The steps are discussed with the results obtained at the mesosystem, microsystem, exosystem, and macrosystem levels (Bronfenbrenner, 1996).

6.2.1 Social capital and socioeconomic factors

In the analyzed research results that illuminate the issue, it emerged that social isolation, language difficulties, unemployment, and discrimination are the basic elements of how the individual experiences the new society. A public health problem that emerges from the analyzed studies was suicidal thoughts or behavior in refugees. As noted, studies conducted in Sweden have found that the suicide risk in second-generation refugees was high; whereas first-generation refugees were less likely to commit suicide than natives (Theine et al., 2015). This study's findings align with the findings of Gilliver et al. (2014), who described that the risk of suicide was higher among younger refugees compared to first-generation refugees.

According to Johnson Singh et al. (2018), the outcome of depression and anxiety is linked to fear of going back to one's country for various reasons, such as war, politics, or fear of harassment. The fear of going back to their homeland may be due to laws and policies that these refugees cannot handle, and the laws and policies are understood as parts of the macrosystem of the socioecological model. The fact that the individual has anxiety or depression in relation to belonging to a minority group upon return is a mesosystem-level issue. Another study showed an increase in depression and anxiety symptoms among refugees from Kurdish and Iraqi groups. The symptoms were associated with factors in the migration and post-migration phases (Nabi, 2014; Siddiqui et al., 2014; Steel et al., 2017). Several aspects of the social-ecological model are present at all stages of the refugee process (Bronfenbrenner, 1996).

Bridging social capital is characterized trust in organizations or neighbors, whereas linking social capital explains the connection between individuals across authority gradients. Bonding social capital explains strong ties between individuals such as, family and friends and often explains the concept of social support (Johnson et al., 2017). The studies analyzed showed that factors before and after migration are linked to the mental disorders of refugees in Sweden, and socioeconomic difficulties were described as risk factors for mental illness. Moreover, social inclusion is an important aspect in describing inequality in health between groups (Lecroft et al., 2016).

There are various factors that can affect a person's mental health and suicide risk. Research has shown that pre-migration factors can also contribute to poor mental health (Sundvall et al., 2015). The number of suicide attempts by asylum seekers in Sweden was higher than in other countries. This is because of the stress that they experienced during the asylum process and the high level of laws and policies that apply to the processing of their applications. The decisions made by Swedish authorities have a significant influence on how these individuals act (Sundvall et al., 2015).

According to the social-ecological model, indicates that the regulations and restrictions imposed by their host country on refugees can have a negative impact on their livelihood (Bronfenbrenner, 1996). For example, the restrictions on working in the time of processing their files or the long time spent on waiting an asylum decision. Several

other studies have supported the increase in the incidence of mental health disorders mentioned earlier in this study. In addition, all the problems are harmful to one's mental health. Most studies that found these mental health problems suggest that effective coping approaches are vital to prevent stress and other psychiatric symptoms.

Exposure to pre-and post-migration stressors affects everyday life after displacement, and refugees are likely to go through such a personal acculturation process. The adaptation to a new environment and the maintenance of the individual's original culture are factors that influence the person during the accusation process. The studies examined indicated that housing difficulties, economic problems, and unemployment were higher among refugees compared to natives (Helgesson et al., 2017; Lecerof et al., 2016), which can be understood as the mesosystem level of the social ecological model.

Furthermore, the included research conveyed that economic disparities and employment conditions were linked to mental health inequalities between native- and foreign-born individuals (Brydsten et al., 2019; Nabi, 2014). Having a job can provide several social and psychological benefits, such as the opportunity to resettle in a new environment with financial safety and security. This can bring about a sense of belonging. However, several studies have shown that unemployment and poverty were higher among refugees than Swedes (Helgesson et al., 2017; Lecerof et al., 2016).

An individual having employment is an important aspect in social inclusion (e.g., networks and social relationships) since social relationships are a significant for refugees' mental health, also refugees have fewer social networks than native Swedes. The fact that the individual has social relationships may mean that they have confidence in other people, which promotes the individual's mental health and reduces stress (Brydsen et al., 2019; Gottvallet al., 2019).

Participating in social activities (e.g., meeting with family, friends, associations, and sports) is considered social capital. This is part of the mesosystem level of the social-ecological model that promotes a strong social environment and increases trust in others (e.g., organizations and authorities), which also promotes social networks and mental health. However, actions targeted at the macrolevel, such as creating better social and economic conditions for refugees, as well as social activities, can help develop better

mental health, not only for refugees but also for the entire population. It is important to consider the importance of the macro level as a policy factor to achieve its full potential, as a mix of interventions at the political level could reduce socioeconomic gaps and inequalities between the populations.

6.2.2 Adaptation of interventions and treatments

There is help and treatment to address mental illness, yet many refugees are unaware of this. The fact that new arrivals do not receive sufficient information about mental illness illustrates the shortcomings of the authorities in Sweden. Rousseau and Frounfelker (2018) state that arriving refugees must receive instruction regarding health knowledge at an early stage upon arrival in Sweden to be able to gain in-depth knowledge of when to seek medical care.

Furthermore, Rousseau and Frounfelker (2018) note that there few new arrivals seek care due to the stigma that exists around mental illness. They argue that it is important to pay attention to new arrivals upon arrival and investigate their state of health to be able to offer early interventions to improve their well-being (Rousseau, Frounfelker, 2018). Wångdahl and Åkerman (2019) claim that newly arrived refugees are a group that has poor physical and mental health, to a significant extent. In many contexts and cultures, mental illness is associated with strong taboos, which can make the situation more difficult for those who need help and support in the new country. The fact that ill health is taboo can lead to difficulties for new arrivals in their new context in Sweden (Wångdahl & Åkerman, 2019).

Efforts to create a change within society and in the target, group is required both at the individual and societal levels. The individual has a great responsibility to maintain a positive attitude toward integration. However, successful integration cannot be achieved only by the individual. Societal efforts are also essential, in the form of adapted efforts and by expanding knowledge about the target group for professional groups that work with refugees. Increased knowledge of the target group facilitates finding measures for the specific problem areas (Wångdahl & Åkerman, 2019). For example, increased cultural competence leads to knowledge of different attitudes and characteristics of mental illness. The integration of new refugees and the distribution of resources in society are both important factors that are covered by social policy.

Treating mental illness in adults as seriously as possible is a crucial part of ensuring that the refugees can adapt to their new environment. This can be done through the establishment of a secure space and the understanding of the causes of mental illness.

6.3.1 The relevance of social work

This study is relevant to social work because the practice of social work is based on supporting people in vulnerable situations. According to Meewisse and Swärd (2006), social work aims for social change, problem solving in human relationships, empowerment, and emancipation with the aim of promoting people's welfare. The present study pertains to refugees who are a particularly vulnerable group who have moved from their home country due to war or terror. Refugees are a vulnerable group in society due to factors such as their ethnicity, culture, and other group affiliations (Wångdahl & Åkerman, 2019).

The first authorities that meet refugees are usually social workers. They can identify individuals with mental health issues. This is very important and can help to establish contacts within the healthcare system. It could make a difference at the individual level if the increasing number of people talking about mental illness can help motivate individuals to seek help and support, which can help them feel better and reach their self-sufficiency goals. It is also no longer taboo to talk about mental illness, which can allow people to feel better and participate more in their employment and other activities (Wångdahl & Åkerman, 2019).

At the group level, it is essential to inform refugees that they are not alone in their mental illness. If more refugees learned that they are not alone in their mental illness, they could contribute to a community, where they could support each other to developmental well-being. On an organizational level, studying entails developing a better understanding of what the target group is experiencing. If various social actors are willing to help and not refer to the next authority, it can help ensure that new arrival refugees receive the proper help at the proper time, which can be decisive for their psychological well-being (Wångdahl & Åkerman, 2019).

6.2 Method discussion

To achieve the study's goals, the scoping review conducted answered the research questions to gain a broader understanding of refugees' mental health in Sweden. This study applied Arksey and O'Malley's steps to summarize the relevant evidence on the subject and describe knowledge gaps to clarify the need for further study. The scoping review served to simplify the study's implementation and analyze the health study evidence (Levac, Colquhoun & O'Brien, 2010). The scoping review was suitable for this study to collect information about the topic, and it was necessary to find a sufficient number of studies that would provide a comprehensive analysis of the literature on this subject. Doing so would allow the study to identify the main findings and provide recommendations (Arksey & O'Malley, 2005).

This way of mapping knowledge without a thorough analysis of the method used does not apply to systematic reviews. Thus, the author of the thesis included articles that have methodologically mixed designs due to two reasons. The first does not need to decide how the method should be designed for a scoping review. The second aspect was the refugees and mental health, which is a growing area of research and the existing evidence based on the issue, is not extensive. This, therefore, helped the author to include available studies which were deemed relevant. In fact, selecting studies regardless of their types of methodology design has been one of the inclusion criteria and facilitated the author of this thesis to generate a reasonable number of articles relevant to the aim of the study.

In addition, the scoping review is narrative and explanatory in nature, which allowed collecting a large number of research without assessing the quality of the research. Scoping review researchers do not need to officially evaluate the quality of the inclusive articles (Levac et al., 2010). A limitation occurs, however, because of the absence of assessing the quality of included studies which is important for evidence-based research. As a consequence, as far as a scoping review is concerned, this may lead to a false conclusion about the nature and extent of those gaps if the quality of articles is not assessed. One of the main limitations of scoping review process was that only one individual was involved in the selection, analysis, and interpretation of the results. This can lead to unavoidable bias when creating the inclusion criteria. For instance, one of the inclusion criteria was that the included studies should be published in English. This

limits the possibilities that relevant studies could have been excluded if they were published in other languages than English.

In a literature review, the in-depth analysis seeks to answer specific research question; where as a scoping review focuses on mapping and categorizing relevant research evidence as a topic. This method was chosen due to time constraints, and the author considered a scoping review to be the most appropriate way to conduct the study and show the landscape of the literature based on a certain question of interest. Another limitation related to this research was that one person conducted the search of samples, analysis, articles, and interpretation of the results. This may have led to impartiality when creating the inclusion criteria. For example, one of the inclusion criteria was that the included articles be published in English, and relevant research could thus have been excluded if it was published in a language other than English.

Moreover, the population age for included studies should also be over 16 years which led to the fact that relevant studies might be excluded due to the age barrier. In this study, three databases used to find material (i.e., Cinahl Plus, Medline, and APA PsycInfo) seemed to be relevant and were recommended by the librarian at Mälardalen University. The databases are considered to be sources that provide suitable results with regard to the study purpose and research questions. This may be a limitation of this study, as there are other databases that could provide relevant articles for this research.

The strength of the study relates to the search strategy that was executed with the support and recommendation of the librarian, especially to be able to determine the appropriate databases. This facilitated saving time and working systematically in the study's method design, which is scoping review. The purpose and questions of the study were established with the help and guidance of my supervisor, which is also a strength. All included research in this study was conducted in Sweden; this is also a strength and means that the study's results are generalizable to refugees who are in Sweden.

Another strength of this study could be that all included studies are based on a variety of random samples, which increases the accuracy of the results. In this study, most previous studies focused on refugees who do not have psychiatric conditions, and the most considered variables were chronic diseases, general health, and the country of

birth. However, few qualitative studies address mental health and factors that affect refugees' mental health in Sweden. The quality of the study may be affected because only one of the 14 included studies used a qualitative method.

As such, another limitation arises due to the absence of respondents' experience of mental health in the study. Although the focus was on people aged 16 and over, some of the research initiated discussed the general population when comparing refugees and Swedish-born people. These studies did not discuss included age groups, and it may be possible that people who were 16 years old were integrated. This may have affected the findings of this study due to the age criteria.

7. CONCLUSION

The analyzed studies indicate that mental illness (e.g., depression, anxiety, psychosis, suicide, and PTSD) are more common among refugees than Swedish-born populations. They also exhibit that low socioeconomic status is more common in refugees compared to native Swedes. Factors that influence refugees' mental health include socioeconomic status, income level, employment, unemployment, and social capital.

At the individual and organizational levels, it is possible to prevent various forms of mental illness through interventions with a focus on discussion of psychosocial and physical work environment, new processes and structures, shortened working hours while maintaining wages, and increased participation.

Lastly, work plays an important role in the lives of all people and can contribute to creativity, independence, and well-being. However, unemployment or sick leave may have serious effects on both physical and mental health.

7.1 Future studies and relevance for social work

According to the studies, refugees have a high prevalence of mental health disorders, though most papers relied on epidemiological methods to arrive at these conclusions. Further qualitative research is needed to understand how immigration affects mental health. It is important that studies are conducted on the factors that may affect the

development and maintenance of refugees' mental health. Through qualitative research, such studies can explore the preventive activities that are conducted in Sweden in response to the influx of refugees.

This study is important for refugee's mental health, as it explains that mental illness is common among refugees in Sweden. It illustrates the factors and prevalence of mental illness among adult refugees in Sweden. The findings of this study can be used to improve public health in Sweden, especially for those who are responsible for implementing mental health measures for vulnerable groups. It suggests that the country's political leaders should increase the number of interventions that aim to improve refugees' conditions.

Future research should focus on mapping how to disseminate knowledge about mental illness to newly arrived refugees. Furthermore, additional information is needed about what measures must be applied for organizations to gain a broader knowledge of mental illness. As mental illness is a growing phenomenon, the relevant actors must improve at training their staff on the cultural differences in attitudes toward mental illness. The staff could hence contribute to handling new arrivals that have mental illness in a more effective way than is conducted today, where new arrivals are referred to other authorities.

REFERENCES

- Andersson, L., Hjern, A., & Ascher, H. (2018). Undocumented adult migrants in Sweden: mental health and associated factors. *BMC Public Health*, 18(1), 1369. doi.org/10.1186/s12889018-6294-8
- Akhavan, SH. Social determinants of health for female Iranian refugees in Sweden. I: The Iranian community in Sweden- Multi disciplinary perspectives. The Multicultural Centre- 2013, School of health, care and social welfare.
- Arksey, H., & O'Malley, L. (2005). Scoping studies: towards a methodological framework. *International Journal of Social Research Methodology*, 8(1), 19–32. doi.org/10.1080/1364557032000119616
- Askheim, O-P. & Starrin, B. (2007). Empowerment i teori och praktik. Malmö: Gleerups
- Bogic, M., Njoku, A. & Priebe S. (2015). Long-term mental health of war-refugees: a systematic literature review. *BMC International Health and Human Rights*, 15(29). doi:10.1186/s12914015-0064-9
- Bosqui, T., Hoy, K., & Shannon, C. (2014). A systematic review and meta-analysis of the ethnic density effect in psychotic disorders. *Social Psychiatry and Psychiatric Epidemiology*, 49(4), 519–529. doi.org/10.1007/s00127-013-0773-0
- Bronfenbrenner, U. (1996). The ecology of human development: Experiments by nature and design. Cambridge, MA: Harvard University Press.
- Brydsten, A., Rostila, M., & Dunlavy, A. (2019). Social integration and mental health - a decomposition approach to mental health inequalities between the foreign-born and native-born in Sweden. *International Journal for Equity in Health*, 18(1), 1–11. doi.org/10.1186/s12939-0190950-1
- Centralbyrån. (2020b). Utrikes födda efter region, ålder i tioårsklasser och kön. År 2000–2019. Statistics Sweden, 2020
- Chase, L E., Rousseau, C. (2018). Ethnographic Case study of a Community Day Center for Asylum seekers as early-stage Mental Health intervention. Chase & Rouseay, 2017. Vol. 88, No. 1, 48-58. <http://dx.doi.org/10.1037/ort0000266>
- Dahlgren, G., & Whitehead, M. (2007). Policies and strategies to promote social equity in health. Background document to WHO- Strategy paper for Europe. Available <https://www.iffs.se/media/1326/20080109110739filmz8uvqv2wqfshmr6cut.pdf>
- Di Thiene, D., Alexanderson, K., Tinghög, P., La Torre, G., & Mittendorfer-Rutz, E. (2015). Suicide among first-generation and second-generation refugees in Sweden: association with labour market marginalization and morbidity. *Journal of Epidemiology and Community Health*, 69(5), 467–473. doi.org/10.1136/jech-2014- 204648

Dunlavy, A., & Rostila, M. (2013). Health Inequalities among Workers with a Foreign Background in Sweden: Do Working Conditions Matter? *International Journal of Environmental Research and Public Health*, 10(7), 2871–2887. doi.org/10.3390/ijerph10072871

Eaves, S., Gyi, D., & Gibb, A. (2016). Building healthy construction workers: Their views on health, wellbeing and better workplace design. *Applied Ergonomics*, 54, 10-18. doi: 10.1016/j.apergo.2015.11.004

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

Folkhälsomyndigheten. (2016). *Folkhälsan i Sverige 2016. Årlig rapportering*. Stockholm: Folkhälsomyndigheten.

Folkhälsomyndigheten. (2019). *Ojämlighet i psykisk hälsa i Sverige. Hur är den psykiska hälsan fördelad och vad beror det på?* Retrieved 2020-04-07. Available <https://www.folkhalsomyndigheten.se/contentassets/6db68e38e372406aab877b469736ec/ojamlikhet-psykisk-halsa-sverige-kortversion.pdf>

Folkhälsomyndigheten. (2021) *Att förebygga psykisk ohälsa i arbetslivet. Resultat från en kartläggande litteraturöversikt om universella interventioner på arbetsplatsen*. Retrieved 2022-11-01. Available at

Fairlie, P. (2011). Meaningful work, employee engagement, and other key employee outcomes: Implications for human resource development. *Advances In Developing Human Resources*, 13(4), 508-525. doi: 10.1177/1523422311431679

Galobardes, B., Shaw, M., Lawlor, D. A., Lynch, J. W., & Smith, G. D. (2006). Indicators of socioeconomic position (part 1). *Journal of Epidemiology & Community Health*, 60(1), 7-12. doi:10.1136/jech.2004.023531

Giacco, D., & Priebe, S. (2018). Mental health care for adult refugees in high-income countries. *Epidemiology and Psychiatric Sciences*, 27(2), 109–116. doi.org/10.1017/S2045796017000609

Giammusso, I., Casadei, F., Catania, N., Foddai, E., Monti, M., Savoia, G., & Tosto, C. (2018). Refugees Psychopathology: Emerging Phenomena and Adaptation of Mental Health Care Setting by Native Language. *Clinical Practice & Epidemiology in Mental Health*, 14(1), 312– 322. doi.org/10.2174/1745017901814010312

Gilliver, S., Sundquist, J., Li, X., & Sundquist, K. (2014). Recent research on the mental health of refugees to Sweden: a literature review. *The European Journal of Public Health*, 24(suppl1), 72–79. doi.org/10.1093/eurpub/cku101

Gottvall, M., Vaez, M., & Saboonchi, F. (2019). Social support attenuates the link between torture exposure and post-traumatic stress disorder among male and female Syrian refugees in Sweden. *BMC International Health and Human Rights*, 19(1), 28. doi.org/10.1186/s12914-0190214-6

Helgesson, M., Tinghog, P., Niederkrotenthaler, T., Saboonchi, F., & Mittendorfer-Rutz, E. (2017). Labour-market marginalization after mental disorders among young natives and refugees living in Sweden. *BMC Public Health*, 17(1), 593. doi.org/10.1186/s12889-0174504-4

Hollander, A., Dal, H., Lewis, G., Magnusson, C., Kirkbride, J., & Dalman, C. (2016). Refugee migration and risk of schizophrenia and other non-affective psychoses: cohort study of 1.3 million people in Sweden. *BMJ*, 352, i1030. doi.org/10.1136/bmj.i1030

Jefee-Bahloul, H., Bajbouj, M., Alabdullah, J., Hassan, G. & Barkil-Oteo, A. (2016). Mental health in Europe's Syrian refugee crisis. *The Lancet Psychiatry*, 3(4):315-317 doi: 10.1016/s2215-0366(16)00014-6

Johnson, C., Rostila, M., Svensson, A. & Engström, K. (2017). The role of social capital in explaining mental health inequalities between refugees and Swedish-born: a population-based cross-sectional study. *BMC Public Health*, 17(1), 117. doi.org/10.1186/s12889-016-3955-3

Johnson-Singh, C., Rostila, M., Ponce de Leon, A., Forsell, Y., & Engström, K. (2018). Ethnic heterogeneity, social capital and psychological distress in Sweden. *Health and Place*, 52, 70–84. doi.org/10.1016/j.healthplace.2018.03.006

Lecerof, S., Stafström, M., Westerling, R., & Östergren, P. (2016). Does social capital protect mental health among migrants in Sweden? *Health Promotion International*, 31(3), 644–652. doi.org/10.1093/heapro/dav048

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

Larsson, S. & Sohlberg, P. (2014). *Socialpsykologi i socialt arbete*. Lund: Studentlitteratur AB.

de los Reyes, Paulina (2001) *Mångfald och differentiering. Diskurs, olikhet och normbildning inom svensk forskning och samhällsdebatt*. SALTSA/ALI. Stockholm.

Kamali, S. (2006a) *Integrationens svarta bok, Agenda för jämlikhet och sammanhållning Slutbetänkande av utredningen om makt, integration och strukturell diskriminering*, Statens offentliga utredningar, SOU 2006:79, Stockholm <http://www.sweden.gov.se/content/1/c6/06/79/01/fb2aa315.pdf> Nedladdad 2023-12-13

Källestål, C (Red). (2004). *Hälsofrämjande arbete på arbetsplatser. Effekter av interventioner refererade i systematiska kunskapsöversikter och i svenska rapporter*. Folkhälsoinstitutet R 2004:32

Meeuwisse, A. & Swärd, H. (2006). *Vad är socialt arbete?* I Sunesson, S., Meeuwisse, A. & Swärd, H. (red), *Socialt arbete: en grundbok*. (s. 27–74). Stockholm: Natur & Kultur.

Menckel, E & Österblom, L. (2000). *Hälsofrämjande processer på arbetsplatsen. Om ledarskap resurser och egen kraft*. Stockholm: Arbetslivsinstitutet

Nabi, F. (2014). The Impact of the Migration on Psychosocial Well-Being: A Study of Kurdish Refugees in Resettlement Country. *Journal of Community Medicine & Health Education*, 4(2), 1000273. doi:10.4172/2161-0711.1000273

Naidoo, J. & Wills, J. (2016). *Foundations for Health Promotion*. London: Elsevier

Niederkrötenhaller, T., Wang, M., Helgesson, M., Wilcox, H., Gould, M., & Mittendorfer-Rutz, E. (2017). Labour market marginalization subsequent to suicide attempt in young migrants and native Swedes. *Social Psychiatry and Psychiatric Epidemiology*, 52(5), 549–558. doi.org/10.1007/s00127-017-1344-6

Pellmer, K., Wramner, B., & Wramner, H. (2012). *Grundläggande folkhälsovetenskap* (3:e uppl.). Stockholm: Liber.

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): 602612. doi:10.1001/jama.294.5.602

Prop. 2017/18:249. God och jämlik hälsa – en utvecklad folkhälsopolitik. Available <https://www.regeringen.se/contentassets/e6210d374d4642328badd71f64ca9846/en-fornyadfolkalsopolitik-prop.-200708110>

Polit, D. F., & Beck, C. T. (2017). *Nursing research: Generating and assessing evidence for nursing practice* (10: uppl). Philadelphia: Lippincott Williams & Wilkins.

Putnam, R. (2000). *Bowling alone: the collapse and revival of American community*. New York: Simon & Schuster.

Regeringskansliet. (2018). Sveriges arbete med global hälsa – för genomförandet av Agenda 2030. Retrieved 2020-04-06, available: <https://www.regeringen.se/4a9c1c/contentassets/f6b8f47b293542e0a4585b866eef76dd/sveriges-arbete-med-global-halsa-for-genomforandet-av-Agenda-2030.pdf>.

Rostila, M., & Hjern, A. (2012). Invandring och ojämlikhet i hälsa. I M. Rostila, & S. Toivanen (Red.), *Den orättvisa hälsan: om socioekonomiska skillnader i hälsa och livslängd* (p. 80–103). Stockholm: Liber.

Rostila, M., & Toivanen, S. (2012). Den orättvisa hälsan. I M. Rostila, & S. Toivanen (Red.), *Den orättvisa hälsan: Om socioekonomiska skillnader i hälsa och livslängd* (p. 13–26). Stockholm: Liber.

Siddiqui, F., Lindblad, U., & Bennet, L. (2014). Physical inactivity is strongly associated with anxiety and depression in Iraqi refugees to Sweden: a cross-sectional study. *BMC Public Health*, 14(1), 502. doi.org/10.1186/1471-2458-14-502

Statens folkhälsoinstitut. (2011). Målområde 4: Hälsa i arbetslivet [pdf]. Hämtad från <http://www.folkhalsomyndigheten.se/pagefiles/12593/R2011-03-Halsa-i-arbetslivet.pdf>

Socialstyrelsen (2015). Psykisk ohälsa hos asylsökande och nyanlända migranter. Ett kunskapsunderlag för primärvården (2015-1-19). Retrieved 2020-04-06, from <http://www.socialstyrelsen.se/publikationer2015>

Statistiska Centralbyrån. (2020a). Immigration and emigration 1970–2019 and projection 2020–2070. Retrieved 2020-04-15, from <https://www.scb.se/en/findingstatistics/statistics-by-subjectarea/population/population-projections/populationprojections/pong/tables-and-graphs/immigration-and-emigration-by-sex-andcountry-of-birth-and-projection/> Statistiska

Skillmark, M. (2018). Uppdrag standardisering - införande och användning av manualbaserade utrednings- och bedömningsverktyg i socialtjänsten. (Doktorsavhandling, Linnaeus University Dissertations, 316). Växjö: Linnaeus University Press.

Steel, J., Dunlavy, A., Harding, C., & Theorell, T. (2017). The Psychological Consequences of Pre-Emigration Trauma and Post-Migration Stress in Refugees and Refugees from Africa. *Journal of Refugees and Minority Health*, 19(3), 523–532. doi.org/10.1007/s10903-016-0478-z

Sundvall, M., Tidemalm, D., Titelman, D., Runeson, B., & Bäärnhielm, S. (2015). Assessment and treatment of asylum seekers after a suicide attempt: a comparative study of people registered at mental health services in a Swedish location. *BMC Psychiatry*, 15(1), 235. doi.org/10.1186/s12888-015-0613-8

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

Whitehead, M., & Dahlgren, G. (2006). Concepts and principles for tackling social inequities in health: Levelling up Part 1. Copenhagen: World Health Organization.

Wångdahl, J., Åkerman, E. (2019). Varför är det viktigt med en god hälsokommunikation för alla nyanlända migranter? 96(1), 56-65 *Socialmedicinsk tidskrift*

WHO. (1948). Constitution. Geneva: World Health Organization.

WHO. (1986). Ottawa Charter for Health Promotion. Geneva: World Health Organization.

WHO. (2018). Mental Health: strengthening our response. Retrieved 2020-04-10, from <https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response>.

WHO. (2020). Social determinants of health: WHO strategic meeting on social determinants of health. Retrieved 2020-04-08, from https://www.who.int/social_determinants/strategicmeeting/en/

APPENDIX

Overview of analyzed articles and their characteristics.

N	Author and year	Research design	population	Purpose of research	Result and conclusions
1	Andersson, Hjern & Ascher (2018)	Quantitative. Cross sectional study.	N=104 Undocumented refugees	To study living conditions, access to human rights and mental health of undocumented migrants living in Sweden.	Without adequate food and shelter, refugees experienced stress. The fear of being deported and disclosure also affected their mental health had a major

					problem.
2	Brydsten, Rostila & Dunlay (2019)	Quantitative study	N=71,643. All refugees	The goal of this study was to analyze the link between social integration and mental health disparities between foreign-born and native-born individuals.	The link between social integration and mental health inequality is a central issue in Sweden. It shows that migrants are more prone to experiencing financial difficulties.

3	Di Thiene, Alexanderson, Tinghög, Torre & Rutz, (2015).	Quantitative, cohort study.	N= 4 million. All refugees	To study extent of suicide in first-generation and second-generation refugees compared with natives.	The risk of suicide was lower among refugees in the first generation compared to natives, and it was higher among second generation individuals. Further research is needed to identify the factors that contribute to this excess risk.
4	Gottvall, Vaez&	Quantitative,	N= 1215	To evaluate	Support for

	Saboonchi (2019).	cross sectional study	Syrian refugees	whether gender moderates the association between social support, exposure to torture and PTSD.	refugees can help minimize the effects of torture on their mental health. It also helps prevent PTSD among those who have experienced it.
5	Helgesson, Tinghög, Niederkröten, Saboonchi & Mittendorfer & Rutz (2017).	Quantitative study	N=1,8 million. All refugees	The objective of this study is to investigate the link between mental disorder and the marginalization of refugees and natives in the labour market.	Compared to native Swedes, refugees are more prone to experiencing unemployment. Mental disorders are also associated with labor market marginalization.

6	Hollander, Dal, Lewis, Magnusson, Kirkbride & Dalman (2016)	Quantitative, cohort study	N= 1.3 million. Middle East, north Africa, sub-Saharan Africa, Asia, Eastern Europe and Russia refugees	The goal of this study is to determine if refugees are more prone to developing psychotic disorders such as schizophrenia. They were compared to non-refugee	Compared to non-refugee migrants, refugees are more prone to experiencing mental illness, such as schizophrenia and other psychotic disorders. This is why it is
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				individuals from Sweden.	important that health care providers are aware of the increased risk of these conditions among refugees.
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7	Johnson, Rostila, Svensson & Engström (2017)	Quantitative, cross-sectional study	N=50,498 All refugees	To discover whether social capital can explain mental health inequalities between non-Swedes people and Swedish.	The role of social capital in the post migration experience is a vital factor that policymakers should consider. Increasing investment in the promotion of social capital can help prevent psychological distress among new arrivals.
8	JohnsonSingh, Rostila, Ponce de Leon, Forsell & Engström (2018)	Quantitative cohort study	All refugees	To examine the association between ethnic heterogeneity and	The link between racial identity and psychological distress is

				psychological pain as well as the role of social capital.	different depending on the background of the individual. For instance, the socioeconomic factors that affect the development and maintenance of racial identity are known to be
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				immigration country with value to migration process.	country that matched their original status were associated with higher psychosocial well-being. On the other hand, there were signs of social and professional regression in the individuals.
					influential.
9	Lecerof, Stafström, Westerling & Östergren (2016)	Quantitative design	N=617 Iraq refugees	The objective of this study is to examine the link between housing and financial problems among Iraqi migrants in Sweden.	Trust and social participation in others are known to protect mental health. Social capital and the social determinants of health are also important factors that can improve mental health.
10	Nabi. (2014)	Qualitative, group interview	N=17 Kurdish refugees	To examine Kurdish refugees' mental health in the	The professional and social status of refugees in a

11	Niederker, Wang, Helgeson, Wilcox, Gould & Mittenruder - Rutz. (2017).	Quantitative, cohort study	2,8 million. All refugees	The goal of this study is to analyze the history of suicide attempts among refugees and Swedes natives.	Individuals who had attempted suicide were more likely to be unemployed than those who did not commit suicide. Among all migrant groups, those from non-European countries were more likely to have higher chances of experiencing unemployment.
12	Siddiqui, Lindblad & Bennet (2014)	Quantitative, cross sectional	N=634 Iraq refugees	To examine the rate of	Being economically

		study		depression and anxiety in refugees from Iraq compared to Swedish	insecure is known to have a negative effect on mental health among refugees. Compared to native Swedes, Middle Easterners are more likely to experience depression or anxiety.
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13	Steel, Dunlavy, Harding & Theorell (2017)	Quantitative study	N=420 refugees from Sub Saharan Africa	to give approximation of premigration trauma, postmigration psychological and stress sequelae of refugees	82 and 83 % of the varian ce in the rates of depres sion and anxiet y was explai ned by variou s factors such as gender , educati on, religio n, and post- trauma tic stress.
14	Sundvall, Tidemalm, Titelman, Runeson & Bäärnhielm (2015)	Quantitative method	N= 88 asylum seekers	The goal of this study is to analyze the factors that affect the clinical assessment of	The time that the asylum proces s and the

					suicide attempt were involved suggested that the decision to
				non-asylum seekers and asylum seekers who have attempted suicide.	seek asylum was very important. It also revealed that the earlier mental health problems that individuals had before moving to another country could

					have contributed to their suicidal behavior.
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