Interplay of sociocultural factors, health literacy and well-being among African asylum seekers and refugees in Asia: A systematic review

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A B S T R A C T

Background: There are many African asylum seekers and refugees (AAR) in Asia. However, little research has been conducted on their well-being within the sociocultural milieu. This systematic review explores the characteristics of AAR's psychological and mental well-being and how their acculturation practices, social networks and support (i.e. social capital), health-related knowledge and skills (i.e., health literacy) influence their psychological and mental well-being.
Methods: The study included relevant peer-reviewed articles from any Asian country/region, published in English. No date restriction was applied. Five databases (i.e. Scopus, PubMed, Web of Science, PsycINFO, and CINAHL) were searched for studies conducted about AAR from any of the 54 African countries and residing in any of the 51 Asian countries. Following a predefined inclusion criteria and quality assessment, nine articles were included in this study. Narrative synthesis approach was used to analyse the articles.
Results: It was found that AARs face significant challenges that culminate in poor psychological and mental well-being, including conditions such as depression and discontent with their lives. Notwithstanding, being in a safe place made some of them optimistic about their future. However, many AARs had difficulties adjusting to the host culture. They had limited awareness of the prevailing health system and services and faced restrictions on their rights to social services, partly because of difficulty obtaining appropriate information. The few social bonds and bridges they possessed enabled them to develop a sense of belonging and protected them from psychological distress. However, problematic social relationships increased the chances of poor health-related outcomes.
Conclusion: The psychological and mental well-being of AAR in Asia is concerning. Hence, more research on how critical health determinants (i.e. social capital, health literacy and acculturation processes from this study) directly and interactively influence their well-being across age cohorts. Given their roles in promoting AAR's well-being, appropriate interventions to improve those critical health determinants are also sorely needed.

Introduction

Asian countries play a significant role in hosting the increasing number of asylum seekers and refugees (Humanitarian Action, 2022). The 1951 Refugee Convention defines a refugee as someone with a well-founded fear of persecution due to race, religion, nationality, political opinion, or membership in a particular social group, who is outside their country of nationality and unable or unwilling to return (Beaton, 2020; Fowler, 2014). Meanwhile, asylum seekers are individuals who have applied for international protection but whose refugee status has not yet been determined (Nakeyar and Frewen, 2016).

Thus, asylum seekers face unique challenges, including insecure residency, fear of repatriation, and restricted rights compared to recognised refugees (Crumlish and Bracken, 2011). Seeking asylum or refugee can be lengthy and adversarial, potentially exacerbating their mental health issues stemming from pre-migration traumas, cultural barriers and post-migration stressors (Beaton, 2020; Crumlish and Bracken, 2011). The number of people forcefully displaced globally had increased by 167.6 %, from 41.1 million in 2010 to 110 million as of mid-year, 2023 (Humanitarian Action, 2022; UNHCR, 2023). Records show that a significant proportion of these refugees and asylum seekers originate from countries in Africa, such as Sudan, the Democratic Republic of Congo,

Somalia, Central African Republic and Eritrea (Humanitarian Action, 2022). Most displaced people in Africa move to other African countries (UNHCR, 2023). However, globally, refugees and asylum seekers often settle in the Middle East, Europe (typically, Germany, Italy, Spain), North America (e.g., Costa Rica, Canada and the United States of America) and Asia (e.g., Iran, Pakistan, Lebanon and Jordan) (UNHCR, 2022).

Research relating to the well-being of refugees and asylum seekers globally has focused on those settled in Western societies, as evidenced by various systematic reviews (Allen-Leap et al., 2023; Bajo Marcos et al., 2021; Hajak et al., 2021). These studies rarely focus on African refugees and asylum seekers (AAR) in Asia (see Posselt et al., 2019). Nevertheless, the number of AAR in Asia is increasing, with some countries, such as Israel, hosting over 50,000 of them, including their children (Eliyahu-Levi, 2022). Unfortunately, existing evidence suggests that many refugees and asylum seekers suffer and remain at risk of poor health-related outcomes (Allen and Easley, 2013; Gülşen et al., 2010). However, sufficient social support, low exposure to discrimination, appropriate integration/adaption into available social services in host societies, education and training opportunities and employment conditions can ensure positive outcomes for this population across age cohorts (Allen-Leap et al., 2023; Hajak et al., 2021; Tippens et al., 2023).

Research on asylum seekers and refugees in Asia has hardly focused on those from Africa (Liew et al., 2022). However, the increasing number of refugees and asylum seekers from Africa recently, alongside the global economic downturn and unfavourable geopolitical conditions (e.g. within Europe, such as the Russia-Ukraine war) that can hamper opportunities for these migrants to settle in Western countries (Humanitarian Action, 2022; UNHCR, 2023), it is likely that more AAR will settle in other locations including the Asian region. For now, most research on Africans in Asia have centred on regular or economic migrants and students, as well as on issues such as their sociocultural adaptation (Akhtar et al., 2015; Amoah et al., 2020b; Castillo, 2015), business pursuits (Bodomo and Ma, 2010), social support (Castillo, 2015; Jiang, 2023), their safety experience and perception (Song et al., 2020), their identity and race (Chow-Quesada and Tesfaye, 2020; Tewolde, 2021; Zhou et al., 2016), and their health and well-being (Adebayo, 2022; Amoah et al., 2020a; Bodomo, 2020; Hall et al., 2014; Hodzi and Amoah, 2022; Lin et al., 2016; Wong et al., 2017). Furthermore, research on Africans in Asia has often examined the living conditions and characteristics of Africans in mainland China. Despite these, there seems to be no comprehensive synthesis of the empirical literature on this group.

Acculturation is a multidimensional process of cultural and psychological changes (e.g. learning a new language and adopting new cultural practices) that emerges due to meeting two or more cultures (Berry, 2003; Sam and Berry, 2010). Acculturation processes impact the mental and psychological well-being of immigrants and refugees (Choy, et al., 2021; d'Abreu, et al., 2019; Nakash et al., 2015). For example, the stress associated with the attempt to assimilate into the host culture can trigger psychological and mental distress among migrants (Nakash et al., 2015). Social capital refers to resources (e.g. social support) available through different social networks (Halpern, 2005; Kawachi and Berkman, 2014). Social capital, whether obtained through family networks, neighbours, or people in influential positions, affects the mental health and psychological well-being of migrants by aiding in post-migration adjustment and reducing isolation, although few studies have been conducted about it (Duren and Yalçın, 2021; Goodson and Phillimore, 2008; Johnson et al., 2017; Villalonga-Olives et al., 2022).

Furthermore, health literacy, the ability to access, understand, appraise, and utilise health information to make appropriate decisions about health, healthcare and disease prevention (Sorensen et al., 2012; Wangdahl et al., 2015), leads to improved self-care, adoption of positive health behaviours, and a better understanding of health services and system (Nutbeam, 2008). Improvement in health literacy of asylum seekers and refugees can enhance their communication with health providers and enable them to access needed resources (e.g. funding) to support their health, all of which have implications for their psychological and mental well-being (Liew et al., 2022). The present study aims to identify and synthesise empirical evidence on the psychological well-being of African asylum seekers and refugees in Asia. It primarily focuses on the state and how important determinants of population health-related well-being, including acculturation processes, social capital, and health literacy, are connected to their psychological and mental well-being. By synthesising existing literature, this study will offer insights into gaps in the well-being of AAR and the constellation of critical factors that independently and interactively affect their well-being. As 2030 fast approaches with the endline for the global Sustainable Development Goals (SDGs), this study sets out to offer some meaningful insights that can inform workable policies and programmes that can propel the attainment of SDG 10 (inequality reduction) and SDG 16 (Peace and Justice) (United Nations, 2015) in the Asian region. Additionally, this knowledge base will provide a platform for further research and suitable interventions to support the health-related well-being of this group of African migrants in the region as part of social welfare provisions. The review is guided by the following research questions (Appendix A shows all the specific research questions used in retrieving data for the study):

1. What are the characteristics of psychological and mental well-being of AAR?
2. How do adaptation to local culture (i.e. acculturation), knowledge of health, health systems and services (i.e. health literacy) and social network support (i.e. social capital) influence the psychological and mental well-being of AAR?

Methodology

Design

This is a systematic review of existing literature initiated by a protocol registered with PROSPERO (ID: CRD42023450221). The study focuses on AAR from any of the 54 African countries. The systematic review adheres to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines, ensuring transparency and replicability throughout the process (Page et al., 2021).

Inclusion criteria

Consistent with the objective of the study, the articles included in this review were those that 1) focus on AAR residing in any of the 51 Asian countries/regions, 2) investigate topics relating to all or aspects of acculturation processes (i.e. how they adapt to cultures in the Asian country/region of residence), social capital (social relationships and social support), health literacy (awareness, knowledge and ability to utilise health information and services) and the psychological well-being (i.e. broadly defined to include hedonic and eudemonic well-being as well as their mental health and well-being) of the AAR, 3) are peer-reviewed empirical studies using qualitative, quantitative or mixed research methods design, 4) are published in English and 5) have accessible full text. No date restriction was set for the year of publications to capture as many studies as available. Studies were excluded if they do not relate to the research questions or key concepts of the study, focus on other migrant populations or regions outside of Asia (e.g. African economic migrants and settlers in Asia), and are not primary research studies (such as editorials, commentaries, or literature reviews without original data).

Search strategy and database selection

A comprehensive search strategy was devised to identify relevant studies. Electronic databases were searched to retrieve articles,

including Scopus, PubMed, Web of Science, PsycINFO, and CINAHL. These databases were selected based on their wide coverage, quality, reliability, multidisciplinary approach, consistency, standardisation, and accessibility. Nonetheless, a hand search in databases such as Google Scholar was also conducted to retrieve additional articles. The search strategy incorporated relevant keywords and controlled vocabulary terms to maximise the identification of studies meeting the research objective. Additionally, a thorough search was conducted in the PubMed database, utilising MeSH (Medical Subject Headings) to enhance rigor. Boolean operators, such as 'AND' and 'OR', were used to combine different key search terms effectively. The search query terms have been provided as a supplementary file (Appendix A).

Study selection and data extraction process

The study selection process involved screening the titles and abstracts of identified articles based on the predefined inclusion criteria. Full-text articles that met the initial screening criteria were retrieved and evaluated for final inclusion. Data extraction was conducted using a structured format to capture relevant information from the included studies. The extraction form included details about the study characteristics (such as authors, publication year, and country), participants, research methods, and key findings. The key findings bothered on acculturation, psychological well-being, and health literacy. With the aid of the data extraction form, the data extracted on acculturation processes involved AAR's sense of belonging, understanding, and integration into the new culture and society, and involvement in local communities' activities. Health literacy data extracted comprised knowledge of and utilisation of health services and issues relating to their ability to find, understand, evaluate and apply health information. Social capital led to the extraction of data on living arrangements (e.g., living alone or with one's family), other social networks, and the support they obtained from such networks. On psychological and mental well-being, data were extracted on factors on the state and factors that influenced it, including a sense of fulfilment, satisfaction with life, happiness, purpose in life, depressive and anxiety conditions, and how these conditions are connected to factors such as rapport with their children's teachers and personal relationship with educators, who offered support for navigating language and cultural barriers as well as providing them assistance in overcoming information and knowledge gaps. Data extraction from the included studies was systematically organised using Microsoft Excel, allowing for efficient management and analysis of the collected information.

Quality assessment of selected studies

The Joanna Briggs Institute's (JBI) critical appraisal checklist for prevalence/incidence studies was used to evaluate the quality of the included studies (Aromataris et al., 2015). The checklist provides a comprehensive set of criteria and guidelines for evaluating the methodological quality, bias, and relevance of the included studies, thereby ensuring the reliability and credibility of the research findings. Two independent reviewers assessed the quality of the included studies, considering aspects such as study design, sample size, data collection methods, data analysis, and potential sources of bias. The adopted checklist consisted of nine questions such as: *(1) "Was the sample frame appropriate to address the target population?" (2) "Was the sample size adequate?" (3) "Were the study subjects and the setting described in detail?" and (4) "Was the data analysis conducted with sufficient coverage of the identified sample?"* (see Munn et al., 2015).

Questions with a 'yes' response were given a mark, and zero marks were given for a 'no' response. Thus, by summing up the scores, the total quality score was computed with a maximum score of 9 points. Based on this scoring system adopted, the reviewers assigned different ranges to indicate the quality of the research. Scores ranging from 0 to 3 were classified as low-quality research, scores from 4 to 6 as moderate quality,

and scores from 7 to 9 as high quality (Hargreaves et al., 2019). Discrepancies or disagreements between reviewers were resolved through discussion and consensus. The results of the quality score for each study have been presented in Table 1.

Data synthesis and analysis

A narrative synthesis approach was employed to summarise and analyse the findings from the included studies. Key themes and patterns emerging from the included studies relative to the research questions were identified and synthesised. The synthesis involved identifying the study designs used across different studies, followed by analysis of patterns in the findings, agreements/consistencies and possible inconsistencies stemming from different designs and study settings, as demonstrated in the findings section. After that, we interpreted our findings and highlighted the implications for practice and future research.

Results

As shown in Fig. 1, 172,152 studies were identified through our specified databases. However, five additional studies were found by cross-referencing the identified studies and hand-searching. After deduplication, 49,121 studies remained, which were further reduced to 48,723 by removing articles without full text. Next, the titles and abstracts of these studies were screened based on the predefined inclusion criteria. These initial screenings resulted in the exclusion of 48,715 studies. Among these, 29,259 studies were considered non-relevant as they did not relate to the research questions. Other studies were excluded because they focused on non-Africans or were conducted outside Asia (see Fig. 1).

After full-text screening and quality assessment, nine (9) studies were selected for inclusion. The included studies were conducted in three Asian locations, specifically Israel, Hong Kong, and South Korea. Six of these studies were conducted in Israel (Oren-Schwartz et al., 2023; Eliyahu-Levi, 2023, 2022; Siman-Tov et al., 2019; Nakash et al., 2015; Shamai and Amir, 2016), two studies were conducted in Hong Kong (Wong et al., 2017, 2016) and one study in South Korea (Kim et al., 2017). The publication range of these studies spanned between 2015 and 2023.

From the nine included studies, the majority of them ($n = 5$) utilised quantitative designs, including randomised controlled trials (Oren-Schwartz et al., 2023), retrospective cohort design (Siman-Tov et al., 2019), and cross-sectional surveys (Nakash et al., 2015; Wong et al., 2016, 2017). The remaining studies ($n = 4$) were qualitative, most of which used in-depth interviews to gather data (Eliyahu-Levi, 2022, 2023; Kim et al., 2017). The diverse methodologies employed by the studies provided both common and unique insights into the psychological well-being and experiences of AAR populations in various contexts. For instance, both qualitative (Eliyahu-Levi, 2023) and quantitative (Siman-Tov et al., 2019; Wong et al., 2017) studies indicated that the AAR experienced difficulties adjusting to the various societies they found themselves in, with healthcare access often being problematic for many of them. Additionally, evidence of poor psychological and mental health was consistent across studies irrespective of the study design (Oren-Schwartz et al., 2023; Shamai and Amir, 2016; Siman-Tov et al., 2019). While studies using randomised controlled trials have provided valuable insights into interventions, such as mindfulness in promoting health-related well-being of AAR (Oren-Schwartz et al., 2023), evidence from qualitative studies also provided in-depth understanding of the complex challenges and coping mechanisms these individuals face, highlighting elements such as social participation as a means of promoting their well-being, thus enriching comprehension of their mental health needs. Moreover, the cross-sectional studies delved into the prevalence and factors associated with psychological distress among AAR populations in different settings

Table 1
Studies identified from the systematic review.

No.	Author(s)	Year	Country of study	Study design	Study population and sample size	Country/ Regions of origin	Study objective(s)	Key Findings and Conclusion	Quality score (out of 9)
1	Oren-Schwartz, R., Aizik-Reebs, A., Yuval, K., Hadash, Y., & Bernstein, A	2023	Israel	Randomised controlled trial	158 Asylum seekers	Eritrea	● To investigate the mediating role of shame and guilt in the association between past traumatic stress exposure, chronic stress post-displacement, and current trauma-and-stress-related mental health problems. ● To examine whether the therapeutic effects of MBTR-R (Mindfulness-Based Trauma Recovery for Refugees) intervention on shame and guilt mediated its impact on post-traumatic stress and depression symptom severity outcomes.	● Shame as a mediator: Feeling of shame mediates the relationship between traumatic stress exposure, postmigration difficulties, post-traumatic stress and depression symptoms among African asylum seekers. ● Mindfulness-Based program: Reductions in shame resulting from the mindfulness-based program were associated with improvements in post-traumatic stress and depression symptoms for this population. This suggests that the mindfulness-based program mediated the effects of shame on these mental health outcomes. ● Conclusion: Addressing shame through mindfulness and compassion-based training aids in the trauma and stress recovery of African asylum seekers.	9
2	Eliyahu-Levi, D.	2023	Israel	Qualitative (Interviews)	8 Asylum seekers	Africans	● To investigate the participation experience of African asylum seeker parents in their children's kindergarten and its impact on their sense of belonging, cultural participation, and community cohesion.	● Increasing sense of belonging: Participation of African asylum seeker parents in kindergartens helped increase their sense of belonging. Despite facing challenges such as poverty and limited time due to work, the parents expressed a desire to be involved in educational activities. ● Increasing cultural participation: The involvement of African asylum-seeker parents in kindergartens facilitated their cultural participation. By participating in various activities, parents had the opportunity to express different layers of their identity within the community, national and global contexts. ● Increasing community cohesion: Kindergarten teachers played a crucial role in establishing a positive personal relationship with African asylum seeker parents. They worked to strengthen the parents' sense of ability, overcome language barriers, and cultivate a sense of belonging. The study suggests that increasing participation can help asylum seekers deal with integration challenges and combat social rejection. ● Conclusion: These findings highlight the importance of promoting the participation and involvement	8

Table 1 (*continued*)

No.	Author(s)	Year	Country of study	Study design	Study population and sample size	Country/Regions of origin	Study objective(s)	Key Findings and Conclusion	Quality score (out of 9)
								of African asylum seeker parents in educational settings, with potential implications for policymakers and educators in creating inclusive environments.	
3	Eliyahu-Levi, D.	2022	Israel	Qualitative (Interviews)	15 Educators of Asylum seekers	Africans	● To examine the actions of educators in mediating health and educational issues.	● Challenges faced by Asylum seekers: African asylum seekers face alienation, exclusion, and violence, along with difficulties in social integration and challenges caused by government policies and the COVID-19 pandemic. ● The impact of educator's support: Asylum seekers who perceived educators as loyal partners and a valuable source of knowledge, developed a positive outlook about their situation, fostering a sense of belonging and empowerment among the asylum seekers. ● Bridging the Gap: The educators established personal relationships with the asylum seekers and worked to bridge the language and cultural gaps, strengthening their cooperation. ● Promoting Inclusion without Imposition: The strategy of the educators was to reduce information and knowledge gaps without imposing changes on the African asylum seekers' lifestyles or prioritising Israeli culture. ● Conclusion: The study emphasises the vital role of intercultural mediation in supporting asylum seekers and the preservation of their traditions, while also aiding their navigation of education, healthcare, and societal norms in the host country.	8
4	Siman-Tov, M., Bodas, M., Wang, A., Alkan, M., & Adini, B.	2019	Israel	Retrospective cohort study	861 Asylum seekers	Africans	● To identify the scope and types of medical services required by asylum-seekers. ● To examine the relationship between delayed medical care and the development of post-traumatic stress disorder (PTSD) among asylum seekers.	● Gender disparities in clinic visits: Male asylum seekers visited the clinic more frequently compared to female asylum seekers (24% vs 15 % respectively), with more than five visits utilised. ● Impact of clinic visits and risk of PTSD: Asylum seekers who experienced higher ransom demands and longer periods in Sinai, had a higher number of clinic visits and were more likely to develop post-traumatic stress disorder (PTSD). ● Health care utilisation: African asylum seekers diagnosed with PTSD sought medical care more frequently,	9

Table 1 (*continued*)

No.	Author(s)	Year	Country of study	Study design	Study population and sample size	Country/ Regions of origin	Study objective(s)	Key Findings and Conclusion	Quality score (out of 9)
								exceeding five visits to the clinic. ● Early clinic presentation: The timing of asylum seekers' presentations at the clinic was found to have an impact on the prevalence of PTSD. Those who sought care closer to their arrival time (up to 18 months) had a significantly lower prevalence of PTSD (3.4 % compared to 40.5 % for those who sought care later). ● Lower clinic usage: Asylum seekers who presented at the clinic earlier had lower utilisation of the clinic's services. ● Traumatic event exposure and PTSD: The length of exposure to traumatic events, rather than the number or types of traumatic events, is closely associated with the development of PTSD among African asylum seekers. Conclusion: These findings shed light on the factors influencing clinic visits among African asylum seekers and highlight the importance of early clinic presentation for better mental health outcomes.	
5	Wong, W. C. W., Cheung, S., Miu, H. Y. H., Chen, J., Loper, K. A., & Holroyd, E.	2017	Hong Kong SAR	Cross-sectional survey (Quantitative)	374 asylum seekers and refugees	Africans	● To investigate the socio-demographic characteristics, health status, health behaviours, and social experiences.	● The protective role of living with family: Living with family reduced the likelihood of positive depression symptoms among African asylum seekers and refugees. ● Prevalence of mental health issues: High prevalence of mental health issues, especially depression and anxiety symptoms, among African asylum seekers and refugees in Hong Kong. ● Perceived health and depression screening: Perception of poor health increased the likelihood of positive depression screening among this population. ● Discrimination and depression screening: Higher discrimination scores were associated with a higher likelihood of positive depression screening. ● Impact of social determinants: Social determinants such as social support, housing, employment, education, and legal status have a significant impact on the mental health outcomes of African asylum seekers and refugees. ● Sociocultural factors and mental health outcomes:	9

Table 1 (*continued*)

No.	Author(s)	Year	Country of study	Study design	Study population and sample size	Country/ Regions of origin	Study objective(s)	Key Findings and Conclusion	Quality score (out of 9)
								Sociocultural factors, including discrimination, acculturation stress, and help-seeking behaviours, have significant impact on the mental health outcomes of African asylum seekers and refugees. • Barriers to mental health service access: Barriers to accessing mental health services for this population included language barriers, lack of awareness, and limited culturally sensitive and affordable resources. • Influences on mental health: Mental health and well-being are influenced by family support, perceived health status, and experiences of discrimination for this population. • Conclusion: The study underscores the importance of improving access to culturally sensitive mental health services, enhancing social support networks, increasing public awareness, and advocating for policy changes to improve mental well-being among African asylum seekers and refugees.	
6.	Kim, M. S., Song, I. G., An, A. R., Kim, K. H., Sohn, J. H., & Yang, S. W.	2017	South Korea	Qualitative (Interviews)	6 refugees (5 asylum seekers and 1 undocumented status	Liberia, Cote d'Ivoire, Mali and Ethiopia	• To investigate the health needs and barriers encountered by African refugee mothers in accessing healthcare services.	• Barriers to accessing healthcare: Several barriers faced by African refugee mothers in accessing healthcare services were reported. These barriers include language challenges, poor nutritional status, limited perinatal care, and higher risks of adverse birth outcomes. • Coping strategies: The coping strategies used by African refugee mothers to overcome these barriers included seeking help from local churches, connecting to Korean pastors who assist pregnant women, and relying on friends for information about free hospitals. • Positive delivery experiences: Despite the barriers faced, most participants expressed satisfaction and positive memories regarding their delivery experiences in Korea. They felt that they were treated the same as native Koreans and received high-quality healthcare and emotional support during antenatal care and delivery. Conclusion: The findings emphasise the need for tailored healthcare	8

Table 1 (*continued*)

No.	Author(s)	Year	Country of study	Study design	Study population and sample size	Country/ Regions of origin	Study objective(s)	Key Findings and Conclusion	Quality score (out of 9)
								services and support for African refugee mothers to improve their access to healthcare and enhance their overall well-being.	
7.	Wong, W. C. W., Cheng, S., Holroyd, E., Chen, J., Loper, K. A., Tran, L., & Miu, H. Y. H.	2016	Hong Kong SAR	Cross-sectional survey (Quantitative)	374 asylum seekers and refugees	Africans	● To identify the health practices, problems, and needs of the study population.	● Health status: A significant proportion (36.1 %) of African asylum seekers and refugees screened positive for depression. General health problems related to necessities and access to health services. ● Health-seeking behaviour: African asylum seekers and refugees with relatively less education, lower health awareness, or engaging in higher-risk behaviours were less likely to have obtained outpatient or inpatient services. ● Social experiences: Problems with case officers and self-reported illness were significantly associated with both general and severe ill health among African asylum seekers and refugees. ● Access to health services: Participants had difficulties accessing medical services in Hong Kong, which were found to be strongly associated with general and severe ill health among African asylum seekers. ● Conclusion: The study highlights the challenges faced by African asylum seekers and refugees in Hong Kong, in terms of their mental health access to basic necessities, access to healthcare, and social support. The study emphasises the need for better access to healthcare for this population and for policy changes that address their health needs.	9
8.	Shamai, M., & Amir, Y.	2016	Israel	Qualitative (Interviews)	16 Asylum seekers	Africans	● To explore the experiences and perspectives of African asylum seekers and refugees in Israel. ● To gather in-depth information about their journey to Israel, their reasons for fleeing their countries of origin, their experiences upon arrival in Israel, coping mechanisms, relationships with other asylum seekers and with Israelis, and their overall life stories.	● Interconnectedness and Resilience: The study highlights the interconnectedness between different aspects of self and the proximate community in shaping resilience and coping among African asylum seekers. ● Pathways to resilience: The study reported that the interactions between various pathways to resilience significantly influenced the nature of resilience and individual narratives. ● Self-enhancement and optimism: It was revealed that self-enhancement had an impact on levels of optimism, which in turn influenced the experience of time and were associated with the challenges	9

Table 1 (*continued*)

No.	Author(s)	Year	Country of study	Study design	Study population and sample size	Country/ Regions of origin	Study objective(s)	Key Findings and Conclusion	Quality score (out of 9)
								and commitment of this population. ● Mastery and control: Levels of mastery and control were influenced by factors (such as self-enhancement, optimism, years of experience, challenge and commitment), which in turn resulted in different types of life story narratives. The narratives reflected the participants' resilience structures, influenced by their unique experiences. ● Individual differences and coping: Individual differences in experiencing difficulties and coping processes were showcased among the asylum seekers and refugees. ● Conclusion: The study highlights the importance of understanding factors that shape resilience and coping among African asylum seekers and refugees. It also emphasises the importance of considering individual differences in promoting positive outcomes for this population.	
9.	Nakash, O., Nagar, M., Shoshani, A., & Lurie, I.	2015	Israel	Cross-sectional survey	118 asylum seekers	Eritrea and Sudan	● To investigate the mental health symptoms and acculturation experiences.	● Acculturation and Mental Health: Asylum seekers who assimilated into the new culture reported higher levels of depressive symptoms compared to those who integrated while maintaining their original culture. ● Acculturation predicted depressive symptoms beyond the effects of detention history and exposure to traumatic events on mental health. ● Vulnerability of asylum seekers: Forced displacement and the need to integrate into unfamiliar environments, makes asylum seekers particularly vulnerable to acculturation risks, which can lead to long-term mental health consequences. ● Impact of restrictive policies: Restrictive policies present significant obstacles to the integration and well-being of African asylum seekers in Israel. Conclusion: The study emphasises the need for more inclusive and supportive policies to promote their successful adaptation and overall mental health.	9

(Nakash et al., 2015; Wong et al., 2016, 2017), shedding light on their current mental health status.

The results of the articles included in this study are presented in Table 1, providing the context and key findings of the included studies related to the acculturation process, social capital, health literacy and psychological well-being among AAR in Asia.
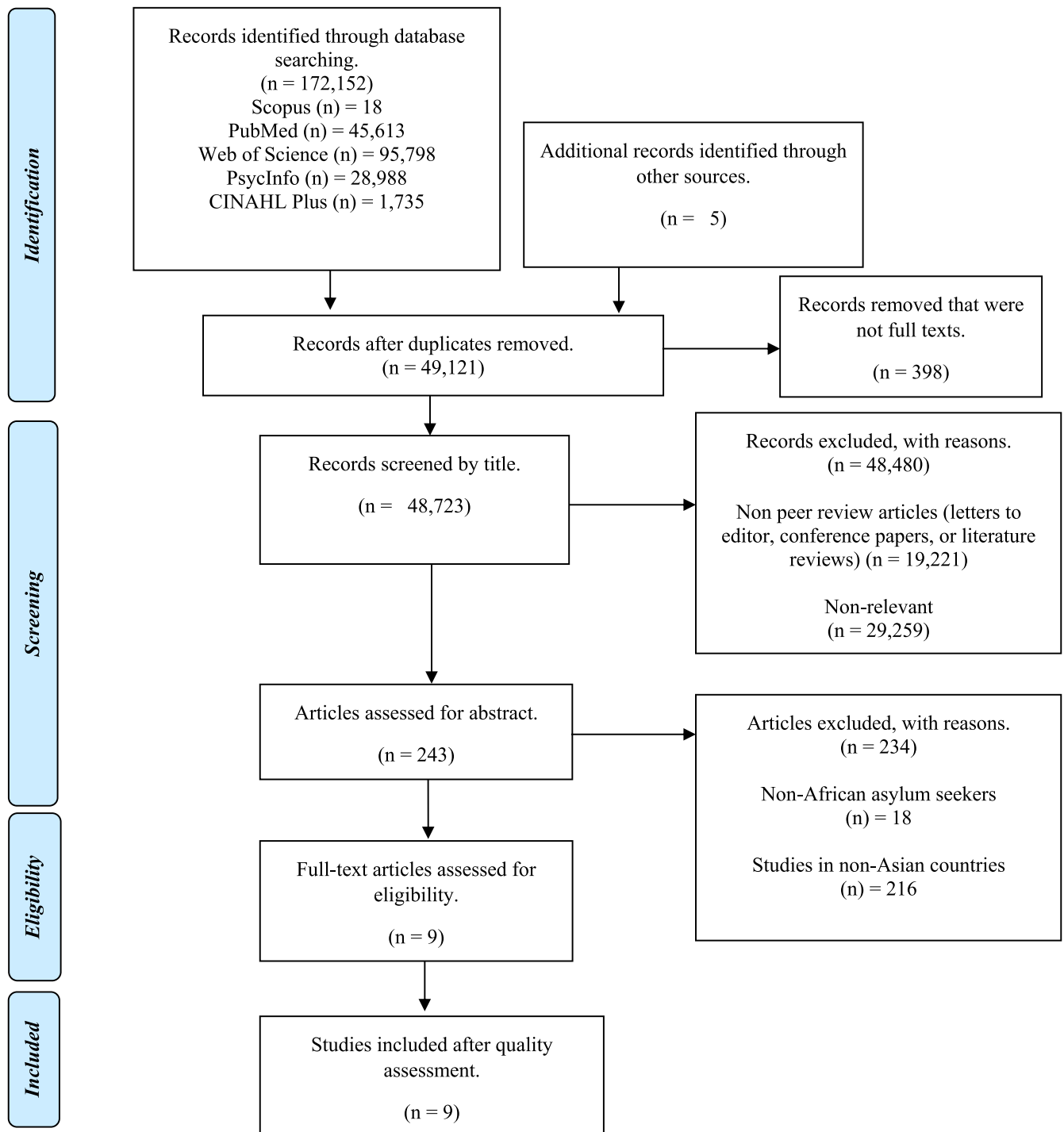
Fig. 1. PRISMA flow diagram depicting the study selection process.

Psychological and mental well-being of AAR in Asia

The evidence in the included studies demonstrates that many AAR in Asia face diverse conditions that trigger or exacerbate psychological distress, including pessimism, hopelessness and a state of despair (Eliyahu-Levi, 2022; Shamai and Amir, 2016; Wong et al., 2016). Their psychological well-being is affected by low physical (Wong et al., 2016) and mental health conditions such as depression symptoms (Nakash et al., 2015; Wong et al., 2017) and post-traumatic stress disorder (PTSD) resulting from exposure to traumatic events they experienced during their migration journey (Siman-Tov et al., 2019). Nonetheless,

the state of stability and sense of refuge among some participants increased their eudemonic well-being by being optimistic about their future despite the challenging circumstances in settling into the new environments, as found among those in Israel (Shamai and Amir, 2016). One interventional study of 158 Eritrea asylum seekers in Israel showed that a 9-week Mindfulness-Based Trauma Recovery program improved post-traumatic stress and depression symptom severity outcomes (Oren-Schwartz et al., 2023).

Acculturation and well-being of AAR in Asia

Many AAR had challenges in adapting to the local sociocultural milieu of their destinations. The study by Nakash et al. (2015) found that AAR who attempted to assimilate into the culture of the host society at the expense of their native culture displayed symptoms of depression. Such situations were likely due to the stressors they faced. For example, Eliyahu-Levi (2022) found in Israel that AAR experienced alienation, exclusion, and violence, which hindered their ability to adapt to the new culture. African Asylum seekers in Hong Kong faced similar conditions due to cultural differences and discrimination (Wong et al., 2017). Because of these challenges, some AAR enrolled their children in kindergarten activities to improve their sense of belonging and community connectedness (Eliyahu-Levi, 2023). Such parents participated in their children's education, which enabled them to obtain a supportive social environment, express their cultural identity, and contribute to cross-cultural understanding and acceptance in their communities (Eliyahu-Levi, 2023). This emphasises the importance of interventions and support systems that facilitate their acculturation process (Eliyahu-Levi, 2022). Future studies can expand on the extant through a thorough investigation of how different forms of acculturation contribute to the psychological and mental well-being of AAR and other asylum seekers in Asia.

Social capital, social engagements, and well-being among AAR in Asia

The social capital of the AAR was not categorically delineated, although some of the included studies investigated it. However, the social capital of the AAR appeared sparse and comprised social support from their own families living with them in the host country (Wong et al., 2017) and through their thin social networks, such as teachers of their wards (Eliyahu-Levi, 2023), and their refugee/asylum seeking case officers (Wong et al., 2016). In Israel, kindergarten teachers played a pivotal role in creating personal connections with African asylum seeker parents, fostering a sense of belonging and empowering parents with a sense of capability. The teachers were instrumental in strengthening parents' sense of ability, addressing their language barriers, promoting access to community resources, and contributing to community cohesion, thereby enhancing their social networks and promoting the well-being of the Africans (Eliyahu-Levi, 2022, 2023). Relatedly, Eliyahu-Levi (2022) found that AAR considered educators to be loyal partners and a source of knowledge and positive influence in Israel.

However, in Hong Kong, the psychological and mental well-being of AAR was often negatively affected by poor relationships with their immigration application case officers (Wong et al., 2016). Moreover, other evidence from Hong Kong showed that African Asylum seekers did not only rely on institutional actors for social support. One study found that family support reduced the likelihood of depressive symptoms among AAR in Hong Kong (Wong et al., 2017). Weak social support was identified as a hindrance to accessing healthcare immediately after migration, with the establishment of social links with the community emerging as a key coping strategy for African refugee mothers (Kim et al., 2017). Overall, supportive social resources, either in the form of family or community resources, improved psychological and mental well-being elements such as optimism and willingness to engage in self-enhancement attitudes (Shamai and Amir, 2016). More research that purposively adopts the theory of social capital and broadens understanding of its determinants and implications for the psychological and mental well-being of specific asylum seekers and refugee groups in Asia is needed to offer context-specific interventions.

Health-related knowledge, health literacy and well-being of AAR in Asia

The studies identified in the systematic review did not explicitly address health literacy issues (at least in terms of its conceptual approach), which strongly indicates the need for more research on health literacy among people of such immigration status in Asia, especially given the advancement of artificial intelligence in the health information and knowledge economy. However, the focus of some of the research on issues of health system awareness (Eliyahu-Levi, 2022, 2023; Kim et al., 2017) and health service utilisation and behaviours among the Asia-based AAR (Eliyahu-Levi, 2023; Kim et al., 2017; Wong et al., 2017) are relevant for this review. Due to apparent low knowledge of the prevailing health system and services, AAR received relevant information on navigating the local health system and services from school teachers in Israel (Eliyahu-Levi, 2022). Indeed, in Hong Kong, most (72.2 %) African Asylum seekers had difficulties accessing medical facilities, and more than half (58 %) also sought medical attention due to ill health (Wong et al., 2017). Another study also reported that about 30.5 % of AAR in Hong Kong were smokers, while about 28.3 % of them frequently consumed alcohol (Wong and Chui, 2016). Additionally, it is evident that many African asylum seekers and refugees had language deficiencies that made their engagement with society and the health system difficult (Eliyahu-Levi, 2023; Wong et al., 2017).

Healthcare access challenges among African refugees, particularly mothers, included socioeconomic factors such as unstable social identity, low economic status, and difficulty in obtaining health insurance, as reported from South Korea (Kim et al., 2017). Language barriers, such as a lack of linguistically suitable health information and limited access to translation services, also hinder healthcare access. Cultural barriers, including religious and cultural differences, were identified as additional obstacles to health service utilisation (Kim et al., 2017). The need for medical attention and engagement in potentially harmful health behaviours may be due to deficiencies in the health literacy of some AAR.

Discussion

This study endeavoured to investigate the state of psychological well-being and, by extension, the mental well-being of AAR in Asia. It also delved into factors that shape their psychological well-being. These factors include their adaptation to the local culture (acculturation), their knowledge of health, health system and health services (health literacy), and the support they receive through their social networks (social capital).

The nine studies included in the review originated from Israel (6), Hong Kong (2), and South Korea (1). This points to the paucity of empirical literature regarding the interplay of sociocultural, health literacy and psychological well-being of AAR in Asia. Even though these studies may not be representative of these three countries and Asia, these are the existing empirical evidence from these three countries that primarily focus on the attributes that are of interest to this review (i.e. sociocultural factors, health literacy, and psychological well-being), because no study was excluded on the grounds of quality assessment, considering the high quality of all the included articles. The review signals the need for more scholarly attention on the health and well-being of African asylum seekers and refugees in the Asian region to drive tailored policies and interventions that can enhance the psychological well-being of asylum seekers and refugees.

Quantitative study designs dominated, made of randomised controlled trials, retrospective cohort design, and cross-sectional design. Nonetheless, both the quantitative and qualitative studies converged on the typical well-being issues affecting AAR, highlighting that indeed AAR in Asia are experiencing a couple of challenges worthy of interventions. The patterns of research methods currently employed, future studies in places where AAR are present but without adequate studies can pursue qualitative research design to offer fundamental understanding of their experiences and situation. Furthermore, given the limited research on the key concepts and issues explored in this study, the use of different quantitative designs including more surveys, repeated cross-sectional designs and even cohort designs can offer more insights toward the development of robust programmes in support of the

AAR. In the absence of adequate research about this group of people, even fundamental surveys can contribute toward profiling the nature, needs and prospects of these people. Furthermore, what is conspicuously missing in extant studies across the region is the use of mixed-method design. Mixed method designs can offer broader perspectives to advance the psychological and mental well-being of AAR (Creswell, 2014). Evidence from the existing studies shows commonalities across different methodologies, which indicates their complementarity in understanding and promoting the psychological and mental well-being of AAR.

The findings revealed that many AAR face numerous personal and sociocultural challenges that adversely affect their psychological well-being and their overall mental health. These observations across the identified studies highlight the consequences of the extenuating circumstances associated with forced migration (Berry and Hou, 2021; Gülşen et al., 2010). The sudden decision to move from a familiar environment and livelihood to often unknown conditions can certainly trigger psychological distress (Allen and Easley, 2013; Gülşen et al., 2010). Furthermore, being in a state of uncertainty, as many of them face in places like Hong Kong, where the UNHCR is not fully ratified, and the local laws do not provide special status to asylum seekers and refugees (Song, 2020), can also exacerbate poor adverse psychological outcomes (Hajak et al., 2021). Related studies have shown that many refugees in Asia have limited awareness of healthcare rights and communication problems (Chuah et al., 2018; Shum, 2019). Such situations are likely to worsen existing mental well-being problems (Liew et al., 2022). However, this study also found evidence that systematic interventions aimed at promoting psychological and mental well-being can improve the situation for AAR in Asia (Oren-Schwartz et al., 2023). Moving forward, it is important to consider whether targeted and adequate resources can be pulled towards promoting the psychological well-being of AAR of different age groups (children, youth, and older persons) and gender in Asia and what potential impediments may arise.

The findings indicated that most AAR struggle to adjust to the local cultural milieus, often due to apparent limited formal mechanisms and resources to facilitate their adaptation to Asian cultures, as has also been observed in other studies (Liew et al., 2022). While none of the studies explicitly employed the acculturation theory to explicate the nature and characteristics of acculturation processes and strategies of the Africans, the findings across the included studies showed that opportunities to promote the adaption of AAR to the local cultures tend to have a positive impact on their well-being (d'Abreu et al., 2019; Nakash et al., 2015). To get a more comprehensive understanding of the acculturation strategies adopted by Asia-based AAR, further research is warranted. This could involve qualitative studies that explore the experiences, challenges, and strategies employed by this population to navigate the acculturation process in Asian host countries. Considering the likelihood of more Africans seeking refuge and asylum in Asian countries in the coming years, obtaining such a comprehensive understanding of their acculturation processes is imperative.

While the included studies did not specifically investigate the role of social capital in the psychological well-being of the AAR, it was evident that the Africans had some access to both strong and weak social ties, which offered them different kinds of support. These findings align with existing studies among general populations (Amoah et al., 2022; Haslam and Haslam, 2019; Putnam, 2000), ordinary migrants and forced migrants (Amoah et al., 2020b; Duren and Yalçın, 2021), which suggest that having adequate levels of social capital can improve one's health-related well-being (Kawachi and Berkman, 2014). In fact, Johnson et al. (2017, p. 1) argue that "social capital explains differences in mental health for some immigrant groups" and have called for more interventions in this direction to prevent psychological distress among immigrant groups". The evidence in the identified studies also supports claims that specific dimensions of social capital, such as bonding social capital (i.e. the support obtained through close social networks such as family) (Szreter and Woolcock, 2004), can promote psychological

well-being as was observed among AAR in Hong Kong.

Support in adjusting to their communities offered through relatively weak ties, such as teachers of their wards, corresponds to the fundamental function of bridging social capital (i.e. support through weak ties, such as friends of a friend or neighbours), which is known to offer resources usually outside of one's immediate network (Halpern, 2005). Promoting AAR's psychological and mental well-being in Asia can benefit from investigating and understanding the characteristics of their bridging social capital as an avenue to promote their well-being. While such weak ties were important to the well-being of participants in this study, an important issue is how AAR without children could have similar opportunities to broaden their social networks and tap into existing resources. Further research to understand how single and childless AAR construct social capital and the implications for their well-being will be worthwhile.

The findings show that tensions with the source of linking social capital (support through state and private structures/institutions and their representatives) (Szreter and Woolcock, 2004), such as asylum and refugee case officers, can trigger psychological distress. The tensions or negative experiences with these representatives can be due to factors such as inadequate support, misunderstandings, lack of empathy, or challenges in communication. These negative interactions can exacerbate the already stressful situation that asylum seekers and refugees often find themselves in. This demonstrates the importance of promoting strong and cordial connections between asylum seekers and refugees and institutions meant to protect their interests, as such connections can greatly enhance AAR's experiences and mental health outcomes.

Given that asylum seekers and refugees experience a significant loss of assets (such as financial resources and possessions), social relationships and skills (e.g. for work), it becomes crucial for them to acquire new resources to rebuild their lives (Strang and Quinn, 2019). An important step is to actively create new social networks that can provide support, opportunities, and access to vital information and resources necessary for their integration and well-being in their new communities (Strang and Quinn, 2019). The present study shows that the well-being of AAR is influenced by different kinds of social capital, including "bonds" (e.g. family support), "bridges" (e.g. networks from the children's school), and "links" (e.g. relationship with immigration and case officers), which "reflect the range of social connections valued by refugees" (Strang and Quinn, 2019, p. 3) and serve as a boost for practical policies to enhance their well-being.

Health literacy research among this population was virtually non-existent. However, the research that examined their health-related knowledge and efficacies pointed to characteristics and behaviours indicating challenges to their health literacy. Evidence among other ethnic minority groups in Asian societies tends to show limited health literacy among such populations, although such research appears non-existent among AAR (Parial et al., 2023; Vandan et al., 2019). African economic migrants in Asia often speak Asian local languages, as observed in Hong Kong (Amoah et al., 2020b), Mainland China (Adebayo, 2022; Bodomo, 2020), South Korea (Kim et al., 2017) and many other Asian societies (Liew et al., 2022). The limited skills in health-literacy-related domains inevitably affect the quality of health services and the likely adoption of deleterious health behaviours.

Such conditions can disadvantage them regarding health outcomes, especially in places such as Israel, where public health services do not fully offer support to non-residents, such as refugees (Eliyahu-Levi, 2022). To a greater extent, the situation of AAR is not surprising and yet calls for a need to explore new ways of supporting them. This is especially important given the perspectives from the social stratification hypothesis that health service, health information access, and utilisation among ethnic minorities, such as AAR, can reinforce their low health literacy and limited access to health services due to their inadequate access to an alternative medium such as digital tools to address gaps in their knowledge (Mesch et al., 2012; Mesch, 2016). Indeed, the situation of many AAR in Asian societies, such as Hong Kong and Israel, is doubly

complex when one ponders this puzzle: How could they improve their health literacy skills if they have limited access and rights in their host societies? The limited research on their health literacy leaves little room to answer this question.

Strengths and limitations of the study

The study has provided a comprehensive overview of the literature on the state of psychological well-being of AAR in Asia and the role of their health-related knowledge and skills, social network and support and cultural adaptation in their well-being. The non-application of the year range made it possible to identify a wide array of literature on the subject. However, it is likely that not all the relevant articles were included due to the exclusion of non-English language-written articles, considering that much research conducted in several Asian countries/ regions are written in the predominant local languages. This explains the small number of eligible studies (*n* = 9) included in this study. The findings cannot be entirely generalised to the experiences of all AAR in Asia. Nonetheless, they offer significant insights into the health-related experience and conditions of this population group.

Conclusion and the way forward

The findings indicate that factors relating to cultural adaptation, social networks, and support, as well as health literacy are, in one way or the other, critical to the psychological and mental well-being of AAR. Given the limited evidence on the subject, particularly on how concepts of health literacy, acculturation, and social capital are interlinked and their consequences for psychological and mental well-being. Such knowledge will offer integrated, comprehensive, and actionable approaches to understanding the well-being of AAR in Asia. Furthermore, given that most studies have focused on adult AAR, it will be prudent also to examine the psychological and mental well-being of young people and children of asylum seekers and refugees in Asia. Child refugees and asylum seekers must adjust to new environments along with the trauma, anxiety, and sometimes depression while still undergoing critical psychological and psychosocial development. The experience of AAR children, who are likely racial minorities, while going through these changes will offer a cross-generational perspective into the psychological well-being of asylum seekers holistically (d'Abreu et al., 2019). Additionally, the gender aspects of the experiences of AAR have received little attention in the existing research. Future studies can broaden knowledge on how AAR men and women adapt to the societies in which they find themselves, construct social capital and state of their health literacy as well as the consequences of these factors for their well-being. Understanding these dynamics will be crucial in developing culturally sensitive and effective interventions to support the psychological and mental well-being of Asia-based African asylum seekers and refugees.

CRediT authorship contribution statement

Padmore Adusei Amoah: Writing – review & editing, Writing – original draft, Methodology, Formal analysis, Conceptualization. **Edward Kwabena Ameyaw:** Writing – review & editing, Supervision, Investigation, Formal analysis, Data curation. **Genevieve Ataa Fordjour:** Writing – review & editing, Writing – original draft, Methodology, Formal analysis, Data curation.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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