European Journal of Trauma & Dissociation 9 (2025) 100535

Contents lists available at ScienceDirect

European Journal of Trauma & Dissociation

journal homepage: www.elsevier.com/locate/ejtd

Review Article

Examining the relationship between coping strategies and post-traumatic stress disorder in forcibly displaced populations: A systematic review

Sandra Figueiredo [a,b,d,*], Adelė Petravičiūtė [c]

[a] Department of Psychology, Psychology Research Centre (CIP) of Universidade Autónoma de Lisboa and of Foundation for Science and Technology, Portugal
[b] Universidade Autónoma de Lisboa Luís de Camões (UAL), Palácio Dos Condes Do Redondo, R. de Santa Marta 56, 1169-023 Lisbon, Portugal
[c] Vilnius University, Department of Clinical Psychology of Institute of Psychology, Universiteto Str. 9-202, Vilnius, Lithuania
[d] University Centre of Research in Psychology (CUIP), Lisbon, Portugal

ARTICLE INFO

Keywords:
Post-traumatic stress disorder
Coping strategies
Emotion focused
Displaced persons
Refugees

ABSTRACT

Forcibly displaced people, especially refugees, experience traumatic events in pre-migration and post-migration stages. Extremely distressing challenges mainly caused by war and harsh traveling conditions during involuntary mobilization may affect severely the mental health of these populations. Research identifies Post-Traumatic Stress Disorder as one negative diagnosis for refugees and with associated comorbidities, but no prevalent evidence was determined for the link between coping strategies and PTSD. This systematic review examines psychological variables involved in the selection of coping strategies among refugees with PTSD or at risk to develop PTSD. By using the Preferred Reporting Items for Systematic Reviews and Meta-Analysis guidelines (PRISMA), the database search method was employed with Scopus, EBSCOhost, and PubMed. 648 records were extracted and 289 were screened. 14 were eligible and reviewed by two independent authors, using the critical appraisal tool to assess the quality of cross-sectional studies (AXIS). Main dimensions of coping strategies were identified, including problem-focused, emotion-focused, avoidant-focused, social support-seeking, and religious coping. Regarding associations, problem-focused coping was often uncorrelated with PTSD levels or linked to lower PTSD. Emotional-focused coping strategies varied considerably, despite of representing significant correlation with lower PTSD. Avoidant coping was associated to higher PTSD. To add, maladaptive strategies, such as other-blame and emotion-focused disengagement, were associated with higher levels of PTSD among forcibly displaced individuals. Mental health services, as well research replication, should provide differentiated care according to sociocultural sensitivity of these displaced persons and attending to knowledge of traumatic events they were exposed.

1. Introduction

Over 117 million individuals globally are forced to flee their countries because of war, human rights violations, and other causes associated with physical and psychological trauma. These individuals often face various disasters severe trauma, and various sorts of physical, sexual, psychological, and other types of violence. Approximately 37.6 million forcibly displaced individuals hold refugee status, and the number is continuously rising (Lechner-Meichsner et al., 2024; UNHRC, 2024b). In this context, 'displaced individuals' refers to international migrants classified as asylum seekers or refugees—people who are forced to leave their country of origin and have little or no choice regarding their destination. Additionally, there are internally displaced individuals, who are compelled to leave their city or region but remain within their country. Internationally displaced persons—commonly referred to simply as 'displaced persons'—are those who are forced to flee their country of birth.

Asylum seekers are individuals who enter a new country and apply for asylum while awaiting a decision, often without subsidiary protection during this period. In contrast, refugees are individuals who have already been granted asylum and subsidiary protection, falling under the framework of international protection. Thus, forcibly displacement refers to people as victims of escape from their lands of origin due to external causes that are happening in those territories and affecting

* Corresponding author at: Department of Psychology, Psychology Research Centre (CIP) of Universidade Autónoma de Lisboa and of Foundation for Science and Technology, Portugal.
E-mail addresses: sfigueiredo@autonoma.pt (S. Figueiredo), petraviciute.ad@gmail.com (A. Petravičiūtė).

https://doi.org/10.1016/j.ejtd.2025.100535
Received 1 February 2025; Received in revised form 1 April 2025; Accepted 2 April 2025
Available online 2 April 2025

directly the human rights and life of those individuals.Forcibly displaced people could experience potentially traumatic events in any of the stages of migration. In the pre-migration stage, many refugees face extremely distressing events, such as war conflicts, persecution, or torture, and witnessing the death of a family member or a friend; during the migration, they may experience further challenges such as separation from family, harsh traveling conditions, loss of belongings, and many more (Długosz, 2023; Figueiredo, Dierks, & Ferreira, 2024; Konstantinov et al., 2023; Schäfer et al., 2023). In the post-migration stage, refugees may experience additional negative events, for example, isolation, poverty, forced family separation, unemployment, discrimination, and legal-system-related difficulties (Khawaja et al., 2008; Michultka, 2009; Mercado et al., 2024; Theisen-Womersley, 2021).

Various stressors and possibly traumatic events during all stages encountered could negatively impact mental health. Given these circumstances, for forcibly displaced people, mainly people who are forced to leave the home country, it is essential to have resources and employ effective ways of coping when facing challenges in every stage of migration (Długosz, 2023; Lushchak et al., 2024; Schäfer et al., 2023).

1.1. Post-traumatic stress disorder and displacement persons

PTSD is defined in the DSM-5 (American Psychiatric Association, 2013) as a trauma and stressor-related disorder whose diagnostic criteria include exposure to a traumatic event (directly, witnessing, learning about that it occurred to a close individual, or experiencing repeated or extreme exposure to aversive details) with symptoms including intrusion, avoidance, negative changes in cognition and mood, and heightened arousal. The disturbance must last more than a month and cause significant distress or impairment according to DSM-5. The International Classification of Diseases (ICD-11) definition of PTSD overlaps with other classifications but also presents distinct differences. Its diagnostic criteria require exposure to an extremely threatening or horrific event or series of events, accompanied by symptoms such as intrusive recollections, avoidance behaviors, and persistent perceptions of heightened threat. These symptoms must persist for at least several weeks and cause significant impairment(APA, 2013; McGinty et al., 2024; Shalev et al., 2017).

A meta-analysis by Blackmore et al. indicates that the lifetime prevalence of PTSD in the forcibly displaced population is approximately 31 %, which is far greater than the 3.9 % lifetime prevalence in the general population. The symptoms of PTSD may persist for a long time after migration and the experience of traumatic events (Dekinger et al., 2021; Herroudi et al., 2024; Shalev et al., 2017). The risk of PTSD among refugees and asylum seekers could be related to multiple factors. These involve the type, intensity, and length of the traumatic experiences suffered before the migration, as well as concurrent mental health difficulties, such as depression, anxiety, or prolonged grief (Długosz, 2023; Lechner-Meichsner et al., 2024; Lenferink et al., 2017). In addition, the risk factors include experienced stressors in the host country (post-migration period), and legal, employment, or social integration difficulties. The scientific literature explores many more variables, such as age, language constraints, employment opportunities, to better understand PTSD in refugee populations (Bogic et al., 2015; Bryant et al., 2023; Knipscheer et al., 2015).

Although PTSD is highly prevalent among forcibly displaced individuals, who constitute a particularly vulnerable population, access to assistance can be challenging - there is a critical need for culturally competent mental health care. To address service gaps, the understanding of cultural diversity, contextual factors, and proper training of mental health specialists is important. By 'cultural competence,' we refer to the ability of practitioners to effectively understand and apply knowledge about different cultures and languages in both assessment and practice. This includes cultural sensitivity to ensure that refugees and asylum seekers develop positive attitudes and motivation toward acculturation in their new country. Additionally, cultural competence involves familiarity with scientifically validated trauma assessment instruments, allowing practitioners to administer evaluations in individuals' native languages without introducing bias in the results, alongside conducting thorough clinical interviews. A common issue is the placement of displaced persons in care institutions without proper follow-up or structured assessment. This is often due to limited resources but, more critically, a lack of awareness regarding validated scientific instruments that are publicly available for use. Those tools will determine a tailored view of which coping will be succeeded in specific and different groups of displaced individuals. Comprehensive mental health policies are essential to support individuals in coping with the challenges of displacement (Bäärnhielm & Schouler-Ocak, 2022; Olufadewa et al., 2022) and likelihood of high levels of stress

1.2. Coping with stress and the transaction model

The transactional model is one of the most prominent models of stress developed by Richard Lazarus (Lazarus, 1984; Lode et al., 2007). According to the theory, the key variable between the individual and environment is the cognitive appraisal of the situation: first, the individual is exposed to a challenging event, then the external or internal demands of the situation are appraised according to the available resources for coping with those demands and then a strategy of coping is initiated. These appraisals depend on individual differences and attitudes toward unexpected circumstances (Lazarus, 1984; Lode et al., 2007). Therefore, coping is a process that includes various efforts (behaviors and thoughts) to manage the internal or external demands of the situation (Lazarus, 1993b; Obbarius et al., 2021). Several coping strategies are worth highlighting Coping strategies play a crucial role in more or less adaptation processes, as the ways individuals manage stressors can significantly improve or worsen their psychological and physical well-being (Biggs et al., 2017; Endler & Parker, 1994). Coping strategies are identified here as acceptance (recognize and accept the stressor), planning (organization of behavior to respond to specific stressful event), restraint coping (controlled reaction toward a stress) and adaptive coping (coping efforts related to longer-term recovery and positive for acculturation). These strategies are result of combined personal and environment factors shaping the individual's response to the stressors. The acceptance and mainly the adaptive coping are the more desirable to deal with stressors in the origin of PTSD.

Lazarus identified two major coping directions: problem-focused and emotion-focused, compared to avoidant and less adaptive coping forms. In the first case, for problem-focused, the individual tries to change the environmental realities and tries to manage the condition that is creating a stressful situation, while in emotion-focused coping, the reaction to the stressful event and emotional state is attempted to manage such as by avoiding or reinterpreting the meaning of the event, even though the reality remains unchanged (Lazarus, 1993a; Lazarus, 1984). The problem-focused coping strategies involve behavioral, cognitive (for example planning), and motivational (for example persistence) components (Aldwin, 2011; Hanley et al., 2021). The emotion-focused strategies include seeking social support or avoidance-focused approaches. The social support strategy is unstable and heavily dependent on the social context (Lazarus, 1993b). Emotion-focused coping usually dominates when the situation is appraised as resistant to change, while problem-focused coping prevails when the situation is still perceived as changeable (Lazarus, 1993b). Avoidant coping refers to behaviors aimed at avoiding systematically the stressor and minimizing the cognitive processing of its meaning. In contrast, adaptive coping involves cognitive intentional disconnection and the use of alternative strategies, such as medication, to manage stress and adapt behavior.

One of the most popular distinctions of coping strategies to assess them is made by Carver et al. (1989). Authors developed the COPE Inventory to measure aspects of problem-focused coping (active coping, planning, suppression of competing activities, restraint coping, seeking of instrumental social support), emotion-focused coping (seeking

emotional social support, positive reinterpretation, acceptance, denial, turning to religion) and less adaptive coping such as a focus on and venting of emotions, behavioral or mental disengagement, also humor and substance use (Carver et al., 1989).

There is no consensus about definite core coping categories among scholars and different models are emerging to systemize coping mechanisms (Stanisławski, 2019). While problem-focused coping is often seen as the most adaptive strategy in scientific literature, as it directly addresses the demanding situation, there is no universal answer to the most effective coping strategy when facing life challenges, as the context plays an extremely important role (Stephenson & DeLongis, 2020). For coping mechanisms to be effective they must be flexible and changeable depending on the context and different stressful circumstances (Lazarus, 1993b). However, this does not mean that attempts should not be made to find patterns regarding the effectiveness of coping strategies in a particular context.

1.3. Links between coping strategies and post-traumatic stress disorder

Coping mechanisms after experiencing various traumatic events play a role in predicting distress. Studies from other populations show that more dysfunctional coping strategies, such as avoidance, relate to higher PTSD levels (Doolan et al., 2017). One of the strongest correlates is avoidant coping including problem/behavioral and emotional/cognitive avoidance (Littleton, Horsley, John, & Nelson, 2007). Avoidant coping could predict PTSD in both ways: when used before and after traumatic events (Gill, 2005; Jore et al., 2020; Nissen et al., 2022; Sommer et al., 2019). For example, using alcohol and other substances may be used as self-medication in individuals with PTSD, while experiencing trauma but not having PTSD causes less risk of developing alcohol and non-alcohol substance use disorders compared to individuals who developed PTSD after trauma (Dell'Aquila & Berle, 2023).

In contrast, problem-solved coping relates to lower distress. There is less evidence about the link between emotion-focused coping and distress when coping with trauma (Littleton, Horsley, John, & Nelson, 2007), although Gill (2005) found a link between usage of emotion-focused coping style after a terrorist attack and higher risk of PTSD. Adaptive coping strategies may protect against future trauma, suggesting a link between the two. Proactive coping and seeking social support may help forecast, mitigate, and even avoid trauma. Coping strategies may indirectly impact trauma exposure since proactive coping can help to increase various resources and lower risky behavior, possibly preventing certain traumas (Jenzer et al., 2020a; Khan & Batool, 2023). Also, an experience of traumatic events may influence how people employ coping strategies (Brea, 2024; DeLapp & Williams, 2021; Jenzer et al., 2020b).

1.4. Coping strategies among forcibly displaced people

Academic research has shown interest in exploring how forcibly displaced persons navigate and cope with their difficult situations (Aarethun et al., 2021; Denkinger, 2021; Renner et al., 2020). Here we need to distinguish for internally and externally displaced people. According to Peevey et al. (2022)) systematic review, individuals who are internally displaced often use problem-solving and social support-seeking coping strategies for example looking for emotional support from family, friends, non-governmental organizations (NGOs), and local communities. Problem-solving coping includes seeking material assistance, looking for employment, addressing harsh negative events, and recognizing their legal rights (Długosz, 2023; Mazhak et al., 2024; (Stephenson & DeLongis, 2020). Also, a frequent coping is cognitive restructuring, this process involves internalizing experiences and exposures (from the post-migration period and also from the pre-migration) as necessary for positive transformation, rather than interpreting them negatively in a way that exacerbates the traumatic experience and increases dependence on coping mechanisms (Isham et al., 2023). This is observed when individuals may reinterpret traumatic events via a cultural, religious or social perspective, acknowledging the benefits of their displacement, accept their circumstances, or establish a more optimistic perspective. While avoidance coping strategies, such as trying to forget difficult experiences, hoping for self-resolution of problems, and using social media or alcohol as a distraction, are less common among forcibly displaced individuals, they nonetheless occur (Cardoso, 2018; Horyniak, Melo, Farrell, Ojeda, & Strathdee, 2016).

Similar ways of coping are used by refugees, both internally and externally displaced, such as religious coping, seeking social and emotional support, focusing on the future, and reinterpreting their situations via positive reframing, and emotion-focused strategies (Aarethun et al., 2021; Denkinger, 2021; Khawaja et al., 2008; Zbidat et al., 2020). Suppression of traumatic memories, distraction strategies, and avoidance of negative emotions are also evident in this group (Goodman, 2004; Rzepka et al., 2022; Zbidat et al., 2020). For example, alcohol and substance use is a problem in some refugee camps, and this coping mechanism is more frequent in males (Kane et al., 2014). Refugees frequently employ help-seeking behavior and coping strategies that integrate new methods appropriate for their resettlement environment while yet preserving traditional practices from their cultures of origin, and it requires culturally sensitive mental health services that recognize and incorporate both types of coping strategies (Aarethun et al., 2021; Rayes et al., 2021; Renner et al., 2020).

Research shows that ways of coping could be predicted by many variables such as age, gender, education, relationship, and employment status among refugees (Rayes et al., 2021), for example, it is known that coping strategies could differ between genders in certain cultures (Al Zoubi, 2023; Kanal et al., 2021). A study of refugees from Chechnya, Afghanistan, and West Africa showed that women were more likely to cope by concentrating on home activities, and family, while men employed a more active approach, being interested in socializing with the community, searching for employment and looking for information related to their situation (Renner & Salem, 2009). Yet, among Iraqi refugees in Jordan problem-focused and emotional-focused strategies were more used by women and avoidant coping was more common in men (Al Zoubi, 2023). It seems that predictors of coping strategies in refugees may depend on many socio-cultural factors. Those factors are provided by the context of country of origin, conditions experienced during forced displacement, and the characteristics of receiving countries.

As aforementioned, it is noted that religious coping is frequently employed among refugee populations. Usually the encountered events are very hard to change or deal with, and praying or putting fate in God gives relief to some individuals (Denkinger, 2021; Ersahin, 2022; Rayes et al., 2021). Also, practicing religion often relates to community, which could provide emotional or material support (Khawaja et al., 2008). However, findings on religious coping as an adaptive in refugee populations are conflicting. For example, research shows that it is related to higher levels of acculturation and social stress among different groups of refugees determined by distinct nationalities of origin (Jore et al., 2020; Scholaske et al., 2021; Usama et al., 2021).

Despite progress in the understanding of PTSD factors among refugees in recent years, further studying of the causes and mechanisms related to PTSD is needed to develop evidence-based intervention and prevention programs for refugee populations (Bryant et al., 2023). In conclusion, forcibly displaced individuals are at an elevated risk of developing PTSD due to the traumatic events they face before, during, and after migration. These individuals use various coping mechanisms that link to their overall well-being. Identifying the styles of coping among forcibly displaced people associated with PTSD risk levels is valuable, as it may provide significant insights into the processes of PTSD phenomenon among this population and give relevant information regarding future intervention and prevention approaches.

A more structured approach to intervention and prevention could facilitate the acculturation process, particularly for refugees and asylum seekers, who experience higher levels of adversity during migration and resettlement compared to other groups, such as economic immigrants or temporarily mobile foreigners. Given their heightened vulnerability, it is crucial to examine the coping strategies employed by refugees and asylum seekers, as they represent an at-risk population whose successful acculturation and overall development depend on effective adaptation mechanisms. In addition, it is important to recognize that numerous sociocultural factors, such as gender, age, legal status, and cultural and religious variables, could have a role in the relationship between PTSD and coping strategies among forcibly displaced individuals.

To the author's knowledge, a thorough review of the current literature and a synthesis of its findings on this topic have not yet been conducted. Without understanding how refugees and asylum seekers cope with and respond to PTSD resulting from forced displacement, societies will encounter greater challenges in facilitating their inclusion and acculturation. In this context, knowledge becomes a crucial tool for practitioners to support sustainable societies by enabling the effective integration of internationally displaced persons into new communities. Thus, this is a global issue that transcends national borders and affects societies worldwide. Therefore, the objective of this study is to develop a systematic review to identify coping strategies associated with PTSD levels among forcibly displaced individuals and to examine contexts where different variables affect the association between coping and PTSD in refugees and asylum seekers.

2. Method

2.1. Questions of the review

Attending to the gap in research regarding coping strategies and PTSD specificities among displaced people, especially refugees who were forced to move away from their home countries, two questions were formulated for this analysis.

1. How do coping strategies employed by forcibly displaced individuals relate to PTSD?
2. Which other relevant variables are studied in the context of exploring the link between coping strategies and PTSD in forcibly displaced people?

2.2. Eligibility criteria

The inclusion and exclusion criteria of studies for the systematic review were defined according to the study questions. The inclusion criteria were:

- English, Spanish, and Portuguese language empirical research.
- Published and peer-reviewed studies.
- Quantitative or mixed methods design (one of the designs must be quantitative).
- The sample is adult (18 years or above) forcibly displaced people: refugees, asylum seekers, and internally displaced persons.
- The specific instruments are used to assess at least one coping strategy and PTSD.
- The articles were published from 1990 to 2024 October.

The defined exclusion criteria of the studies were:

- The sample consists of or includes individuals younger than 18 years old.
- Systematic reviews and meta-analysis.
- Qualitative studies.
- Grey literature (including thesis and dissertations).
- Samples with additional mental illness diagnosis.

In what respects the criterion about qualitative studies, while qualitative studies provide valuable perspectives on the subject, they are not predominantly used in systematic reviews, by comparison with quantitative data (Randles & Finegan, 2023). The synthesis of findings, a key feature of quantitative research, is not achieved to the same extent in qualitative studies. Due to their inherently broader and more subjective analytical approach, qualitative studies often lack the structured synthesis required for systematic reviews, particularly in health-related fields (Dixon-Woods, 2011). In this context, PTSD is examined through specific cases where concrete data provide insights into coping strategies. Additionally, the direct engagement of researchers with data in quantitative studies is generally considered more reliable than the indirect data interpretation common in qualitative research (Jones, 2004). Furthermore, qualitative studies face challenges in identifying patterns of commonality, which is essential for understanding the vulnerable populations analyzed in this systematic review (Lucas et al., 2007).

Regarding the exclusion of mental illness as a criterion, this decision was made to prevent bias and to examine PTSD as a distinct disorder among displaced persons while considering their forced mobility between their country of origin and the host country. The presence of comorbid mental illnesses alongside PTSD could introduce bias in analyzing the characteristics of trauma-related disorders and the coping strategies specifically associated with PTSD. While individuals with PTSD may also experience other mental health conditions, these were not considered the focus of this systematic review.

2.3. Data extraction and search strategy

A systematic search strategy was used according to the Preferred Reporting Items for Systematic Reviews and Meta-Analysis guidelines (PRISMA; Mohrer et al., 2009), and the database search method was employed. In October 2024, the references were obtained from Scopus, EBSCOhost, and PubMed, restricting the search to English, Spanish, and Portuguese publications between 1990 and 2024. Three electronic databases were selected: Scopus, EBSCOhost, and PubMed to comprehensively cover the relevant research literature. The search stringers were adopted regarding the main goal of the system review focused in the type and styles of coping expected to be used among international displaced persons under forced migration condition. For this condition, asylum seekers, refugees and also the internally displaced were considered in the search. The final search strings were then developed (Table 1).

The Boolean function, AND" was used to narrow the search according to the research questions; the function "OR" was utilized to identify potential coping strategies, to broaden the findings given the wide-ranging conceptualization of coping strategy in academic literature.

The references from all three databases were imported into the

Table 1
Final search strings and respective databases.

Databases	Search string
Scopus	TITLE-ABS-KEY (coping OR cope OR "coping strategies" OR "coping skills" OR "coping intentions" AND ptsd OR "post traumatic stress disorder" OR "posttraumatic stress disorder" OR "post-traumatic stress disorder" AND "forcibly displaced" OR refugees OR "asylum seekers" OR "internally displaced")
EBSCOhost	Coping OR cope OR coping strategies OR coping styles OR coping skills OR coping intentions AND ptsd OR post traumatic stress disorder OR posttraumatic stress disorder OR post-traumatic stress disorder AND Forcibly displaced OR refugees OR asylum seekers OR internally displaced
PubMed	"Forcibly displaced" OR "refugees" OR "asylum seekers" OR "internally displaced" AND Ptsd OR "post traumatic stress disorder" OR "posttraumatic stress disorder" OR "post-traumatic stress disorder" AND Coping OR cope OR "coping strategies" OR "coping mechanisms" OR "coping styles" OR "coping skills"

COVIDENCE systematic review software. The duplicates were automatically removed. First, two authors independently screened the titles and abstracts of the studies for possible inclusion in this review. In the following stage, the articles underwent a full-text evaluation by both authors to assess their eligibility for inclusion in the systematic review. Any discrepancies identified during the article review process were examined, resulting in a consensus between the two authors.

2.4. Data synthesis and quality assessment

The forms of selected study characteristics and relevant synthesized results were developed, with a strong focus on the relationships between coping strategies and PTSD across all the studies.

Each selected study was evaluated using the critical appraisal tool to assess the quality of cross-sectional studies (AXIS; Downes et al., 2016), suitable for systematic reviews. The AXIS tool aims to address common issues in cross-sectional research and assist in evaluating the quality of the studies in the reviewing process (Downes et al., 2016). Two independent authors did the quality assessment, the inconsistencies were discussed and resolved. The results were presented graphically using the Checklist and Risk of Bias Visualization Tool (ROBVIS) in Fig. 1.

3. Results

3.1. Study selection

The search produced a total 648 of records across the three databases. Following the elimination of duplicates ($n = 305$), 343 articles were subjected to title and abstract screening, further, 289 papers were removed according to predefined criteria. In the following step, 54 publications were selected for full-text review, however, only 52 of these articles were successfully retrieved. Ultimately, 14 studies met the eligibility criteria and were included in the systematic review. A flowchart representing the study selection process is illustrated in Fig. 2.

The sample age range of the two studies selected included participants from 17 years old, however, the articles were ultimately included in the systematic review since the non-adult population represented only a small proportion of the overall sample (Ai et al., 2005, 2007).

3.2. Characteristics of studies

Fourteen studies were included in this systematic review. The features of every included study are presented in Table 2. The table was constructed considering the publication year, type of forced displacement, demographic data, the study design and aim, the tools used to measure coping strategies and PTSD levels, the variables examined, and the key outcomes.

The synthesized data of studies' features, including sample characteristics and tools are presented in Table 3. It is important to highlight that the exact proportions of refugees, internally displaced individuals, and asylum seekers in the total sample could not be determined precisely because several studies included participants from various groups without providing a detailed breakdown for each category (Buhagar et al., 2022; Fino et al., 2020; Hooberman et al., 2010).

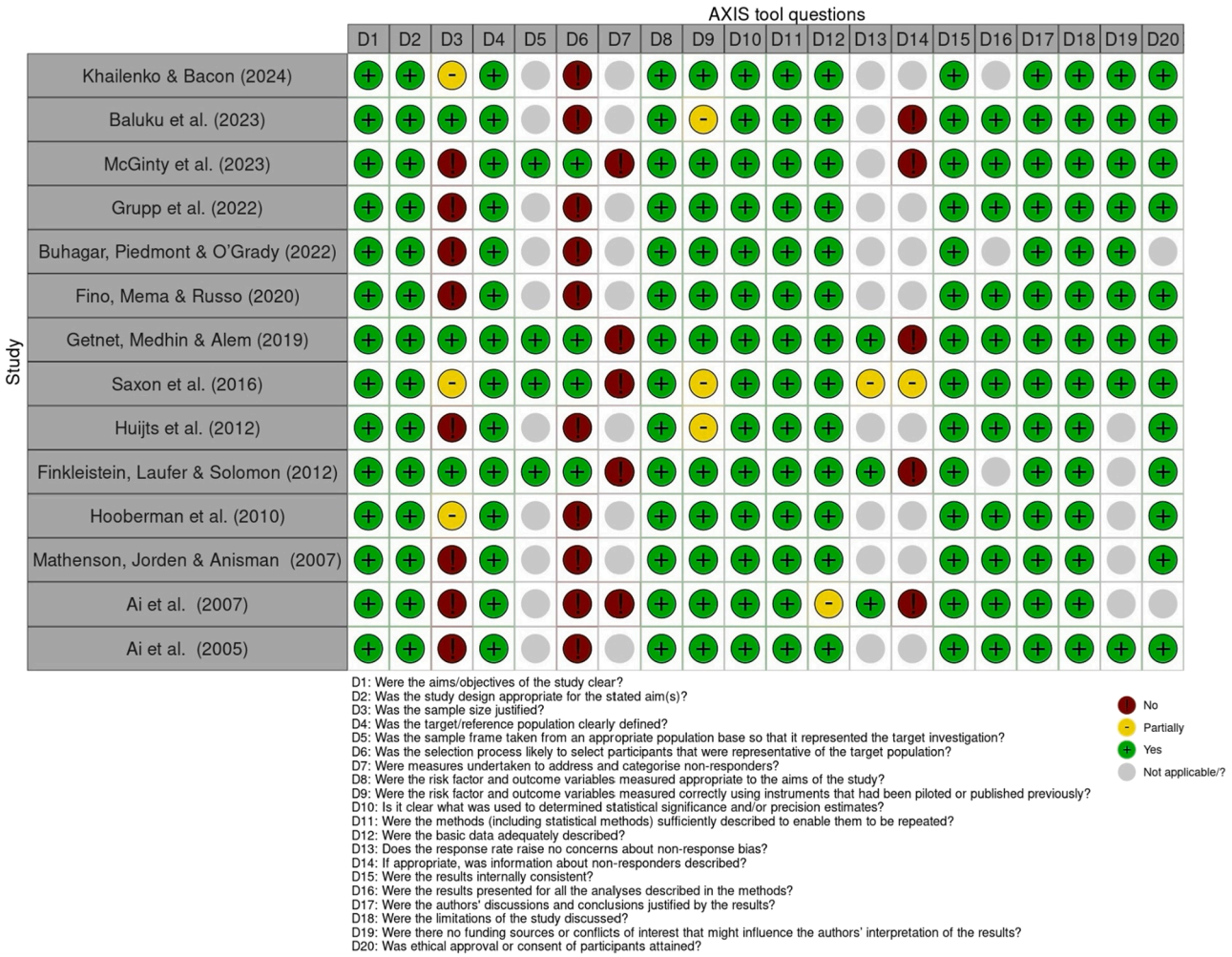

Fig. 1. Checklist and risk of bias visualization tool.

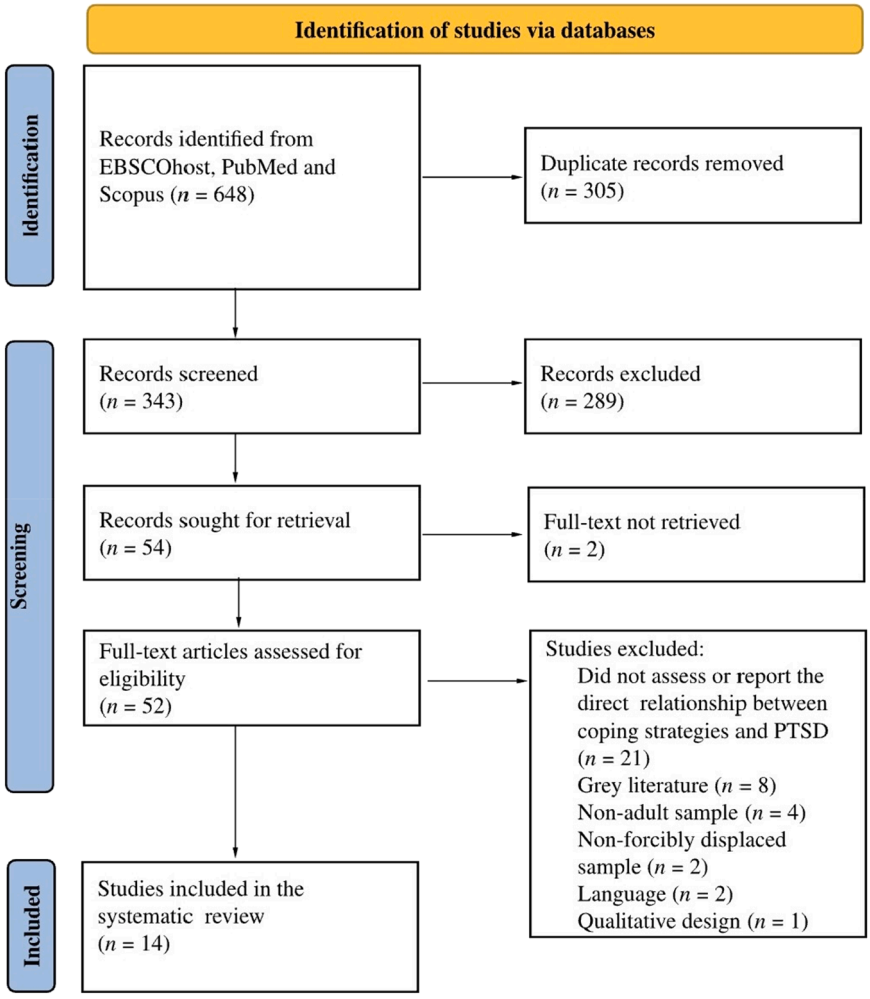

Fig. 2. Identification of studies and databases in flow diagram from PRISMA.

The overall sample size was 8420, with females accounting for a slightly higher share of the total. The majority of studies focused on refugees. The largest number of studies included participants from African or European countries, with host countries located in Europe and North America. Almost all studies employed a cross-sectional design.

The HTQ-30 was the most often used tool for measuring post-traumatic stress symptoms, while the Brief COPE was used to evaluate coping techniques. However, both PTSD and coping strategies were assessed using a wide range of tools, with up to nine different instruments used to evaluate coping strategies. Furthermore, some researchers did construct validity tests of the instruments used and developed different coping categories that were not present in the original versions of the measures, for example, the "Stoic-focused coping" developed when utilizing the Brief COPE (McGinty et al., 2023).

Table 4 summarizes the key results of all fourteen studies included in the systematic review. The main dimensions of coping strategies were identified, including problem-focused, emotion-focused, avoidant-focused, social support-seeking, and religious coping, based on the assessment of coping strategies in the included studies. It is noteworthy that social support-seeking and avoidant coping may be considered a component of emotion-focused coping in certain typologies (Aarethun et al., 2021; Carver et al., 1989; Denkinger, 2021; Khawaja et al., 2008; Zbidat et al., 2020). However, because of the widely varied range of strategies of emotion-focused coping, it is valuable to distinguish avoidant coping, which illustrates separating or distancing the individual from the stressor (Endler & Parker, 1994). Additionally, social support-seeking and religious coping were reviewed as separate dimensions.

Great part of the studies reviewed indicated a positive correlation between avoidant coping and PTSD among forcibly displaced individuals. Considering more specific coping strategies, one single research identified a correlation between denial and lower PTSD levels (Grupp et al., 2022), whilst other avoidant coping strategies were either positively correlated with PTSD or exhibited no significant association.

Regarding other coping strategies, the consensus was limited, yet, certain trends seemed apparent. Problem-focused coping was often uncorrelated with PTSD levels or linked to lower PTSD levels, except for a single study that evaluated "approach coping". However, this dimension was notably heterogeneous, including not just active coping but also strategies such as emotional support and passive acceptance (Baluku et al., 2023), which do not accurately represent problem-focused coping.

Emotion-focused coping comprises diverse coping strategies often referenced in the academic literature. It usually includes both more positive and negative elements of emotional regulation in response to stressful circumstances (Stanisławski, 2019). In the included studies emotional-focused coping strategies varied considerably. More maladaptive strategies, such as other-blame and self-blame, as well as emotion-focused disengagement, were associated with higher levels of PTSD among forcibly displaced individuals (Mathenson et al., 2007). Conversely, more broadly defined emotion-focused coping strategies were linked to lower PTSD levels or no significant association in a few studies.

Considering social support seeking, no association was found with PTSD levels in most studies, yet two associations with lower PTSD, the

Table 2
Individual studies' characteristics in ascend year order.

Authors	Year	Sample	Countries of origin	Host countries and timeframe	Design and study aim	Tools	Coping strategies assessed	Other variables assessed in relation to PTSD or coping strategies	Results on relationship between coping strategies and PTSD
Khailenko & Bacon	2024	229 women: 121 refugees Age M = 36.45, SD = 12.35 108 internally displaced persons Age M = 41.75, SD = 13.74	Ukraine	16 European countries (61 % of refugees' residence is in Germany) Most refugees (93,4 %) and IDPs (85.2 %) were displaced >12 months ago.	Cross-sectional To investigate the relationship between post-traumatic stress symptoms, resilience, and avoidant coping in refugees and IDPs.	Brief COPE (Carver, 1997) PTSD Checklist for DSM-5 (PLC-5; Blevins et al., 2015)	Avoidant coping	Demographic characteristics Resilience War exposure Social support Migration status	Avoidant coping related to higher PTSD levels (r = 0.46, p < .01). Avoidant coping directly predicted higher PTSD levels among refugees (β = 0.44, p < .001) and IDPs (β = 0.45, p < .001).
Baluku et al.	2023	352 refugees 74.4 % men Age M = 29.74, SD = 8.57, ranging from 18 to 70 years	South Sudan Somalia	Uganda Staying in host country M = 4.63 (SD = 4.63) years.	Cross-sectional To examine whether PTSD symptoms associated with COVID-19-related distress during the early stages of the pandemic affected adherence to the control measures, with a focus on psychological inflexibility and coping strategies as potential interacting antecedents.	Brief COPE (Carver, 1997) Impact of Events Scale (IES-R; Weiss, 2007) adapted to the COVID-19 context	Avoidant coping Approach coping (including active coping, emotional and instrumental support, positive reframing, planning, and passive acceptance)	Demographic characteristics Psychological inflexibility Adherence to COVID-19 control measures	Both avoidance (r = 0.53, p < .001) and approach coping (r = 0.36, p < .001) related to higher levels of PTSD.
McGinty et al.	2023	2198 internally displaced persons 68.1 % women Age M = 45, SD = 4.49	Ukraine	Ukraine M = 17.49 (SD = 4.49) months since displacement.	Cross-sectional To examine the relationship between coping styles and IDC-11 PTSD and Complex PTSD.	Brief COPE (Carver, 1997) ITQ (Cloitre et al., 2018)	Problem-focused coping Emotion-focused coping Avoidant-focused coping Stoic-focused coping	CPTSD Gender	Higher levels of avoidant coping were observed among participants who met diagnostic requirements for PTSD than who did not (η^2 = 0.15, p < .001). There were no differences regarding problem-focused, emotion-focused, and stoic-focused coping strategies between groups (p > .05).
Grupp et al.	2022	119 Asylum-seekers 71 % men Age M = 28, SD = 7.8 In comparison to: 120 Germans without a migration background 65 % women Age M = 37, SD = 16.5 years	Eritrea Somalia Cameroon Ethiopia Nigeria Togo Sudan	Germany Staying in host country M = 2 (SD = 2.7) years.	Mixed methods (cross-sectional and interpretative phenomenological analysis) To explore beliefs about appropriate strategies to cope with trauma and symptoms of PTSD among asylum-seekers of predominantly Eritrean, Somalian, and Cameroonian origin in Germany,	Brief COPE (Carver, 1997) Post-Traumatic Stress Diagnostic Scale (PDS; Foa et al., 1997)	Active coping Denial Substance use Use of instrumental support Use of emotional support Humor Acceptance Religion	With or without a migration background Country of origin Number of traumatic events	Denial (r = −0.21, p < .05) and use of instrumental support (r = −0.21, p < .05) related to lower PTSD levels. Substance abuse (r = 0.30, p < .05) related to higher PTSD levels. Active coping, use of emotional support, humor,

(*continued on next page*)

Table 2 (*continued*)

Authors	Year	Sample	Countries of origin	Host countries and timeframe	Design and study aim	Tools	Coping strategies assessed	Other variables assessed in relation to PTSD or coping strategies	Results on relationship between coping strategies and PTSD
					and their relationship with trauma exposure and symptoms of PTSD.				acceptance, and religion strategies did not relate to PTSD levels ($p > .05$).
Buhagar et al.	2022	111 asylum seekers and refugees, who has PTSD diagnosis and experienced torture 58 % women Age $M = 38$, $SD = 10.3$, ranging from 22 to 66 years 91 % Christian	21 countries (92.8 % from continental Africa)	United States	Cross-sectional To examine the role that religious faith may play in the traumatic coping of a small sample of largely monotheistic torture survivors currently residing in the United States.	Brief RCOPE (Short Form; Pargament, 2003) The Harvard Trauma Questionnaire (HTQ-30; Mollica et al., 1992)	Religious coping divided into positive and negative coping	Demographic characteristics Religious practices Daily spiritual experience Religious social support Gender	Both positive ($r = 0.26$, $p < .01$) and negative ($r = 0.27$, $p < .05$) religious coping were related to higher PTSD levels in the total sample. Both positive ($r = 0.48$, $p < .01$) and negative ($r = 0.40$, $p < .01$) religious coping were related to higher PTSD levels among men. Both positive and negative religious coping were not related to PTSD levels among women ($p > .05$). Negative religious coping directly predicted PTSD ($\beta = 0.29$, $p < .01$) in the total sample
Fino et al.	2020	83 asylum-seekers and refugees 97.6 % men Age $M = 47.7$, $SD = 8.4$, ranging from 31 to 65 years	Middle East countries	Albania Duration living in refugee camps $M = 23.6$ ($SD = 7.6$ years).	Cross-sectional To examine how exposure to pre-migration war related trauma and duration of living in refugee camp can impact on PTSD and psychiatric morbidity, while assessing the moderating role of trait resilience and coping style.	The coping strategies inventory-short form (CSI-SF; Tobin et al., 1989) The Harvard Trauma Questionnaire (HTQ-30; Mollica et al., 1992)	Problem-focused engagement Emotion-focused engagement Problem-focused disengagement Emotion-focused disengagement Total engagement focus Total disengagement focus	Demographic characteristics Psychiatric morbidity Resilience War related trauma	Emotion-focused disengagement ($r = 0.48$, $p < .05$) and total disengagement focus ($r = 0.45$, $p < .05$) related to clinical PTSD levels. Other strategies were not related ($p > .05$). Problem-focused engagement ($r = 0.38$, $p < .01$), emotion-focused engagement ($r = 0.32$, $p < .05$), total engagement focus ($r = 0.45$, $p < .01$) related to no/low PTSD levels. Other strategies were not related ($p > .05$).
Getnet et al.	2019	562 refugees 54.1 % women Age $M = 29.6$, $SD = 10.18$,	Eritrea	Ethiopia Average stay in refugee camp was 3.71 years.	Cross-sectional To test the significance of mediating and moderating roles of sense of coherence,	Coping Style Scale (Araya et al., 2007) Primary Care PTSD Screener	Task-oriented Avoidance-oriented Emotion-oriented	Pre-migration and post-migration living difficulties Duration of	Task-oriented coping predicted lower levels of PTSD ($\beta = -0.07$, $p < .05$) in the path

(*continued on next page*)

Table 2 (*continued*)

Authors	Year	Sample	Countries of origin	Host countries and timeframe	Design and study aim	Tools	Coping strategies assessed	Other variables assessed in relation to PTSD or coping strategies	Results on relationship between coping strategies and PTSD
		ranging from 18 to 74 years			adaptive coping styles and social support in the relationship between exposure to trauma and psychological symptoms in a refugee population in sub-Saharan Africa.	(PC-PTSD; Prins et al., 2004)		stay in the camp Social support Depression Sense of coherence	model. The direct association between other coping strategies and PTSD were not reported.
Saxon et al.	2016	3600 internally displaced persons from conflicts in the 1990s (n = 1200) and 2008 (n = 1200) and former IDPs returned after 2008 (n = 1200) 65.3 % women Age from 19 to 60+ years	Georgia	Georgia	Cross-sectional To investigate what coping strategies are used by conflict-affected persons in Georgia and their association with mental disorders.	Amended version of the Brief Coping Inventory (Carver, 1997) Trauma Screening Questionnaire (TSQ; Brewin et al., 2002)	Behavioral disengagement Denial Gambling Focusing in venting emotions Mental disengagement Substance abuse Acceptance Active coping Humour Religious coping Use of emotional support Use of instrumental social support	Gender Depression Anxiety	Behavioral disengagement (Males OR = 1.66 [1.12–2.48], p < .05; Females OR = 1.53 [1.11–2.13], p < .05), denial (Males OR = 1.65 [1.11–2.44], p < .05; Females OR = 1.98 [1.47–2.56], p < .05) and gambling (Males OR = 1.88 [1.07–3.29], p < .05; Females OR = 1.58 [1.01–2.45], p < .05) predicted higher PTSD levels among both genders. Humour (OR = 0.47 [0.35–0.63], p < .01) and use of emotional social support (OR = 0.47 [0.35–0.63], p < .01) was related to lower PTSD levels among women but not men (p > .05). Focus on venting emotions, mental disengagement, substance abuse, use of instrumental social support, active coping, acceptance, and religious coping were not related to PTSD levels in both groups (p > 0.05).
Huijts et al.	2012	335 refugees with PTSD diagnosis 74.9 % men Age M = 41.9. SD =	38 countries (Middle East, former Yugoslavia, Asia, Africa,	Netherlands Staying in the host country M = 12.8 years (SD = 5.54).	Cross-sectional To investigate the relationship between coping style, PTSD, and quality of life in	COPE-EASY-32 (Kleijn et al., 2000) COPE inventory (Carver et al., 1989) Harvard Trauma	Problem-focused coping Social support seeking Emotion-	Quality of life	Avoidant coping related to higher PTSD levels (r = 0.35, p < .001). Problem-focused coping (r =

(*continued on next page*)

Table 2 (*continued*)

Authors	Year	Sample	Countries of origin	Host countries and timeframe	Design and study aim	Tools	Coping strategies assessed	Other variables assessed in relation to PTSD or coping strategies	Results on relationship between coping strategies and PTSD
		8.2, ranging from 21 to 64 years	South America)		traumatized refugees.	Questionnaire (HTQ; Mollica et al., 1992)	focused coping Avoidant coping		−0.24, $p < .001$) and emotion-focused coping ($r = -0.12$, $p < .05$) related to lower PTSD levels. Social support seeking did not relate to PTSD levels ($p > .05$). In the final path models PTSD directly predicted lower problem-focused coping ($\beta = -0.23$, $p < .001$) and higher avoidant coping ($\beta = 0.35$, $p < .001$) Lower problem-focused coping ($\beta = -0.16$, $p < .01$) and higher avoidant coping ($\beta = 0.36$, $p < .001$) directly predicted PTSD. Social support seeking and emotion-focused coping did not have direct predictive relationships with PTSD ($p > .05$).
Finkleistein et al.	2012	478 refugees 53.9 % men Age $M = 39.84$, $SD = 10.14$, ranging from 21 to 64 years	Ethiopia	Israel Been in the host country for 16, 9 or 5 years.	Cross-sectional To examine the relations between coping strategies, PTSD, and dissociation among Jewish Ethiopian refugees in Israel (following exposure to pre-, peri- and post-migration stressful events).	Strategic Approach to Coping Scale (SACS; Hobfoll et al., 1993). Harvard Trauma Questionnaire (HTQ; Mollica et al., 1992).	Individualism Avoidance Indirect action Mastery Self-reliance Passivity Social joining Seeking social support Action	Group (Moses, Solomon or Family Reunification) Dissociation Exposure to traumatic events	Avoidance strategy related to ($r = 0.20$, $p < .001$) and directly predicted ($\beta = 0.16$, $p < .001$) higher PTSD levels. Other correlations between coping strategies and PTSD were not reported, but all of them were either positive ($r > 0$, $p < .05$) or not significant ($p > .05$).
Hooberman et al.	2010	75 immigrants, asylum seekers and refugees that have experienced torture 58.7 % men Age $M = 33$,	Only the continents were reported: Africa Asia Europe South American	United states, New York	Cross-sectional To investigate the effect of coping style, social support, cognitive appraisals, and social comparisons on PTSD symptom severity.	Coping Strategies Inventory-Short Form (CSI-SF; Tobin, 1989) Harvard Trauma Questionnaire (HTQ; Mollica et al., 1992).	Problem-focused engagement Emotion-focused engagement Problem-focused disengagement Emotion-	Social support Social comparison Cognitive appraisals	Emotion-focused disengagement related to higher PTSD levels ($r = 0.39$, $p < .01$). Problem-focused engagement, problem-focused disengagement and emotion-

(*continued on next page*)

Table 2 (*continued*)

Authors	Year	Sample	Countries of origin	Host countries and timeframe	Design and study aim	Tools	Coping strategies assessed	Other variables assessed in relation to PTSD or coping strategies	Results on relationship between coping strategies and PTSD
		SD = 8.5), ranging from 18 to 58 years					focused disengagement		focused engagement did not relate to PTSD levels ($p >$ .05).
Mathenson et al.	2007	90 refugees 64.4 % women Age *M* = 24.9, *SD* = 7.9, ranging from 18 to 53 years	Somalia	Canada Most participants staying in the host country for 9 - 15 years.	Cross-sectional To evaluate the direct and indirect (by altering coping) impacts of trauma on stressor-related outcomes, including symptoms of depression and PTSD, along with self-reported physical health. In this regard, to evaluate profiles of coping with ongoing acculturation stressors, and to assess both morning cortisol levels and cortisol reactivity to stressor reminder cues.	The Survey of Coping Profile Endorsement (SCOPE; Mathenson & Anisman, 2003) Impact of Events Scale (IES-R; Weiss & Marmar, 1995)	Problem focused/Active divided into problem-solving, cognitive restructuring, active distraction, social support seeking and religious faith Emotional engagement divided into rumination, emotional expression, other-blame and self-blame Avoidant divided into emotional containment, passive resignation, and cognitive avoidance	Depressive symptoms Physical health Cortisol levels Number and type of trauma	From problem-focused/active strategies only cognitive restructuring related to higher trauma symptoms (r = 0.22, $p <$ .05). Other strategies did not relate to trauma symptoms ($p >$ .05). Overall emotional engagement (r = 0.51, $p <$ .001) and rumination (r = 0.42, $p <$ .001), emotional expression (r = 0.27, $p <$ .01), other-blame (r = 0.43, $p <$ .001) and self-blame (r = 0.23, $p <$ .05) related to higher trauma symptoms. Overall avoidant strategy r = 0.39, $p <$ .01) and emotional containment r = 0.29, $p <$ .01), passive resignation r = 0.37, $p <$ .001) related to higher trauma symptoms; cognitive avoidance did not relate to trauma symptoms ($p >$ .05.
Ai et al.	2007	50 war refugees from the sample of the Ai et al. (2007) 54 % men Age *M* = 33, *SD* = *12*, ranging from 17 to 69 years	Kosovo Bosnia	United States, Washington State Staying in host country for about 10 months.	Cross-sectional follow up study To examine how specific psychological factors might influence post-war adaptive outcomes (the coexistence of posttraumatic growth and PTSD symptoms).	Multidimensional coping scale (Wills, 1996) PTSD Symptom Scale (PSS; Foa et al., 1993)	Behaviour coping Cognitive coping Anger coping Avoidant coping	Demographic characteristics Trauma score Hope Personal growth	Cognitive (r = 0.45, $p <$ .001) and avoidant (r = 0.55, $p <$ .001) coping related to higher PTSD levels. Behaviour and anger coping did not relate to PTSD levels ($p >$ .05).
Ai et al.	2005	138 war refugees About half are men Age *M* = 35,	Kosovo Bosnia	United States, Washington State Just arrived in	Cross-sectional To investigate the use of private prayer among Muslim war	Brief Religious Coping Scale (Pargament, 1999) PTSD Symptom	Religious/ spiritual coping divided into positive and negative coping	Gender Religiousness War trauma Depression	Both positive (r = 0.33, $p <$ .001) and negative (r = 0.19, $p <$ .05) religious coping

(*continued on next page*)

Table 2 (*continued*)

Authors	Year	Sample	Countries of origin	Host countries and timeframe	Design and study aim	Tools	Coping strategies assessed	Other variables assessed in relation to PTSD or coping strategies	Results on relationship between coping strategies and PTSD
		ranging from 17 to 79 years 96 % Muslim		the host country.	refugees from Kosovo and Bosnia.	Scale (PSS; Foa et al., 1993)		Types of praying	were related to higher PTSD levels.

Table 3
Synthesized characteristics of the studies.

Total sample	$N = 8420$ About 60.1 % women
Sample	Refugees ($n = 7$) Asylum-seekers and refugees ($n = 3$) Internally displaced persons ($n = 2$) Refugees and internally displaced persons ($n = 1$) Asylum-seekers ($n = 1$)
Countries of origin	Africa ($n = 8$) Europe ($n = 7$) South America ($n = 2$) Middle East ($n = 2$) Asia ($n = 2$)
Host countries	Europe ($n = 6$) North America ($n = 5$) Africa ($n = 2$) Middle East ($n = 1$)
Design	Cross-sectinal ($n = 13$) Mixed methods ($n = 1$)
Tools used to assess PTSD symptoms	The Harvard Trauma Questionnaire (HTQ-30) (Mollica et al., 1992) ($n = 5$) Impact of Events Scale (IES-R) (Weiss, 2007; Weiss & Marmar, 1995) ($n = 2$) PTSD Symptom Scale (PSS) (Foa et al., 1993) ($n = 2$) PTSD Checklist for DSM-5 (PLC-5) (Blevins et al., 2015) ($n = 1$) ITQ (Cloitre et al., 2018) ($n = 1$) Post-Traumatic Stress Diagnostic Scale (PDS) (Foa et al., 1997) ($n = 1$) Trauma Screening Questionnaire (TSQ) (Brewin et al., 2002) ($n = 1$) Primary Care PTSD Screener (PC-PTSD) (Prins et al., 2004) ($n = 1$)
Tools used to assess coping strategies	Brief COPE (Carver, 1997) ($n = 5$) The coping strategies inventory-short form (CSI-SF; Tobin et al., 1989) ($n = 2$) Brief Religious Coping Scale (Pargament, 1999, 2003) ($n = 2$) Multidimensional coping scale (Wills, 1996) ($n = 1$) Coping Style Scale (Araya et al., 2007) ($n = 1$) COPE-EASY-32 (Kleijn et al., 2000) ($n = 1$) COPE inventory (Carver et al., 1989) ($n = 1$) The Survey of Coping Profile Endorsement (SCOPE; Mathenson & Anisman, 2003) ($n = 1$) Strategic Approach to Coping Scale (SACS; Hobfoll et al., 1993) ($n = 1$)

Table 4
Findings on the link between main coping strategies and PTSD.

Coping strategy	Total associations found with PTSD levels		
	Positive	Negative	No association
Problem-focused coping	1	3	6
Emotion-focused coping	-	1	1
Emotion-focused engagement	-	1	1
Emotion-focused disengagement	2	-	-
Rumination	1	-	-
Emotional expression	1	-	-
Other-blame	1	-	-
Self-blame	1	-	-
Anger coping	-	-	1
Avoidant coping	9	-	-
Denial	1	1	-
Substance use	1	-	1
Mental disengagement	-	-	1
Emotional containment	1	-	-
Passive resignation	1	-	-
Cognitive avoidance	-	-	1
Behavioral disengagement	1	-	-
Social support seeking	-	-	1
Use of instrumental support	-	1	1
Use of emotional support	-	1 (among women only)	1
Venting emotions	-	-	1
Religious coping	-	-	2
Positive religious coping	2	-	-
Negative religious coping	2	-	-

use of instrumental support and emotional support among women, were observed.

Religious coping was not related to PTSD levels in the studies where the Brief COPE was employed. However, both positive and negative religious coping was observed to be associated with PTSD among mostly Muslim and Christian forcibly displaced individuals in the studies where it was assessed.

When examining additional variables and the context in which the relationship between PTSD and coping strategies was investigated, some tendencies could be observed. Demographic factors, particularly gender differences, are often considered. Additionally, this relationship has been explored in studies that examine associations with other forcibly displaced individuals' psychological issues, such as depression, anxiety, complex post traumatic stress disorder (CPTSD), and dissociative symptoms. Also, some studies included more positive variables, such as resilience, personal growth, social support, and quality of life. Furthermore, the type and frequency of the experienced trauma, and the migration-related or post-migration stressors are occasionally examined. It is important to note that in a few included studies, the relationship between PTSD and coping strategies did not occupy a central role, but rather appeared as additional variables alongside the primary variables related to the research aims.

3.3. *Quality assessment of included studies*

The quality assessment for each included study using the AXIS tool designed to evaluate certain domains of cross-sectional studies is presented in Fig. 3. Only the quantitative part of the article was evaluated of the study by Grupp and colleagues (2022). The summary of the evaluation scores for each question in each study is depicted in Fig. 3.

The quality assessment of the studies indicated that the primary issue is the representativeness of the samples in the included studies. Only four studies had samples that could be considered representative of the target population. This may result from the intrinsic challenges in reaching populations of refugees, asylum-seekers, or internally

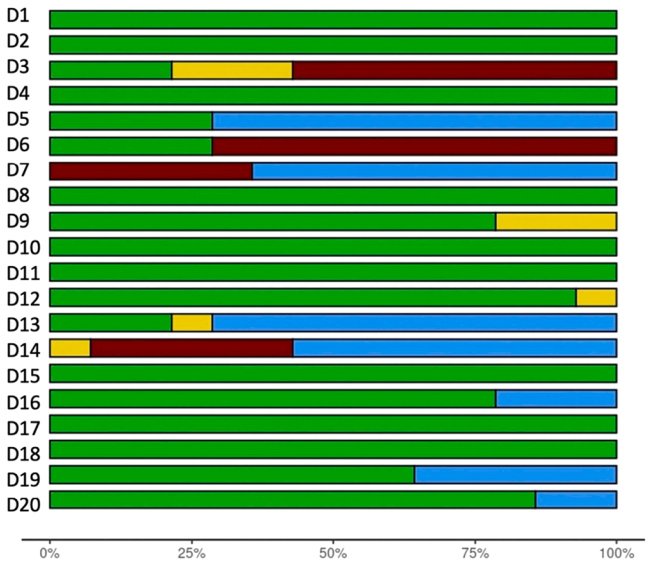

Fig. 3. Individual quality assessment of the included studies using the AXIS tool.
Note. Green - "yes", yellow – "partially", red - "no", blue – "no information or does not apply".

displaced individuals. In addition, the justification for sample sizes is frequently lacking. On the other hand, appropriate methods were selected in the studies to achieve the aims, and reliable and valid instruments were used.

4. Discussion

To our knowledge this is the first systematic review examining coping strategies predicting PTSD management and including contexts of origin of refugees. Considering our findings from 14 studies, during this systematic analysis, we aimed to develop a comprehensive narrative analysis based on evidence-based psychological research to examine how PTSD influences coping mechanisms among refugees and how these mechanisms, in turn, moderate PTSD. With impact for future traumas during lifespan.

The first question remains whether PTSD alters coping strategies and vice versa among forcibly displaced individuals, necessitating further longitudinal research in this area. Additionally, the high number of refugees since last decades are not yet sufficiently studied toward PTSD specificities (regarding different refugees, nationalities, nature of war conflicts and hosting countries) and coping strategies.

The effectiveness of means of coping certainly differ across various political, cultural, social, and economic contexts, with strategies that are successful in one environment potentially being irrelevant, inapplicable, or impractical in another. We can conclude variability across studies and trials in what respects coping in pre-migration and post-migration periods (Cardoso, 2018; Khailenko & Bacon, 2024; Weiss, 2007). For that variability contributes the fact that researchers need to reach more agreement on how to define coping strategies theoretically and include relevant demographic factors when studying the connection between coping strategies and PTSD (Ai et al., 2005, 2007; Baluku et al., 2023; McGinty et al., 2023). Among the included studies, the definitions varied a lot, especially regarding emotion-focused coping (Fino et al., 2020; Hooberman et al., 2010; McGinty et al., 2023).

Also, about the aforementioned biased terminologies and semantics, refugees, asylum seekers and internally displaced persons were not always well clarified (or they are merged) in samples of screened studies. Terms are interchangeably for these different populations in some papers (Bogic et al., 2015; Finkleistein et al., 2012; Getnet et al., 2019). Refugees are often conflated with economic immigrants, while asylum seekers are frequently overlooked within the broader concept of refugees. Additionally, there is a lack of clarity in distinguishing displaced persons from internally displaced individuals. Many studies fail to differentiate these groups appropriately, which can impact the accuracy of behavioral analyses and the interpretation of coping strategies. To ensure analytical precision, it is crucial to distinguish between the following specific populations: refugees, asylum seekers, economic immigrants (who migrate voluntarily rather than due to war or political oppression), non-permanent foreign residents, and internally displaced persons (who migrate within their country of origin). This is crucial to understand what population and background we are addressing to. Refugees are forced to move away from their country of origin. Differently, internally displaced persons move away from their homes in forcibly way but they stay living in the country. These two conditions cause direct consequences in mental health, refugees tend to experience more anxiety and less coping behavior difficulted by high levels of PTSD, displaced persons internally experience more stress and resilience, and low levels of PTSD (Dhungana et al., 2022; Kurapov et al., 2023; Mikuta et al., 2022).

To add, coping strategies appeared in some studies (outlining for 14 eligible outputs in the systematic review) with few attributed value or not central for the targeted intervention facing PTSD in refugees and other displaced persons. This may be explained in the alignment of Snijders et al. (2018) that denoted two perceptions about PTSD and resilience, as well coping strategies as being forms of resilience: trauma and associated stress disorders take part of the individuals' personality (in this case regarding refugees) or they change and disappear over time. And, in line with core variables in research of PTSD and coping strategies, little data addressed the moderators and factors that explain the variability of strategies and behaviors. Avoidance behavior was frequently observed as coping in displaced persons (Grupp et al., 2022; Huijts et al., 2012; Hanley et al., 2021; Khan & Batool, 2023)Some avoidant strategies could be seen to some extent more positive, for example, distraction by learning a host country language or working (Rzepka et al., 2022). Avoidant coping strategies exhibit some overlap with the PTSD avoidance factor (as being one of the clusters of the four-dimensional constructs of PTSD), which may be one explanation for the observed strong associations between the two (avoidance and PTSD).

We learned a consensus, in literature, about promoting more adaptive coping strategies to handle stressors in daily life to improve refugees' psychological adjustment (Seglem et al., 2014; Snijders et al., 2018). The evaluation of coping mechanisms in individuals exposed to potentially traumatic events is important, as coping strategies may predict and, on the other hand, reduce PTSD (Gil, 2005; Khailenko & Bacon, 2024). In the specific case of avoidance strategy, it is likely not reducing but, on the contrary, aggravating PTSD. Mental health professionals should take into consideration refugees' coping mechanisms, accentuate the adaptive strategies, and advise the utilization of effective coping approaches in specific contexts (Zbidat et al., 2020). Avoidance and other PTSD symptoms such as intrusive memories and hyper reactivity may change in terms of expression regarding traumatic events refugees were exposed. As well, the culture and education from the country of origin may affect coping strategies to deal with different forms of PTSD (Kurapov, Balashevych, Tsurikova, & Dubynskyi, 2022; Maria et al., 2021). 8420 refugees were identified with origin in Africa and Eastern Europe before forced mobilization, and currently living in Europe and North America as receiving countries. These demographic routes may explain how differently displaced persons are dealing with hosting countries an acculturation.

Thus, findings from included studies in the review concluded a prevalence of specific coping strategies: problem-focused, emotion-focused, avoidant-focused, social support-seeking, and religious coping. The main core was related to emotion-focused (Carver et al., 1989), while social support-seeking and religious coping were reviewed as separate dimensions. Other attempts of coping were found but not

considered as stable in coping strategies (the case of humor and acceptance) or were not considered important to face PTSD in refugees because they were not well directed or effective (the case of emotional support). On the other hand, religious coping was prevalent among specific groups of refugees which was related to previous cultural beliefs and religion practices (Denkinger, 2021; Ersahin, 2022; Grupp et al., 2022; Rayes et al., 2021; Renner et al., 2020).

Regarding the second question of the study, about contextual variables explaining the relationship between coping strategies and PTSD in forcibly displaced people, evidence remains to explain in a useful manner for identification of needs among refugees, as well to provided tailored intervention. By 'contextual variables effect,' we refer to the significant impact of factors such as religion, cultural background of the country of origin, prior educational attainment, employment status (including specialized and non-specialized jobs), and languages spoken at home (Figueiredo & Silva, 2008). These factors strongly influence an individual's motivation and attitudes toward the host country. Consequently, they shape attitudes (positive or negative) and motivation (intrinsic or extrinsic) toward the local population, workplaces, educational institutions, and, more broadly, the social, cultural, and religious norms of the receiving country. The extent to which refugees and asylum seekers understand and are predisposed to acculturation in their new environment plays a crucial role in determining their level of inclusion and the coping strategies they adopt (Buhagar et al., 2022; Maier et al., 2022; Pargament, 2003). Understanding which coping mechanisms are linked to better or worse outcomes for those who have been forcefully displaced is of interest (Bäärnhielm & Schouler-Ocak, 2022; Olufadewa et al., 2022). Previous research indicated that cognitive, emotional, and spiritual coping resources and engagement coping in refugee and asylum seeker populations correlate with an improved quality of life and higher life satisfaction (Grupp et al., 2022; Seglem et al., 2014). Factors of religion, community support, and self-efficacy after trauma also play a positive role among forcibly displaced individuals (Denkinger, 2021; Ersahin, 2022; Rayes et al., 2021; Renner et al., 2020). Disengagement ways of coping are usually more associated with less adaptive outcomes and relate to lower life satisfaction in refugees (Maier et al., 2022; Seglem et al., 2014; Taufik & Ibrahim, 2020). Distraction and avoidance coping strategies are common when the focus of a forcibly displaced person is on survival, in that case, these could be effective while experiencing traumatic situations, but may be maladaptive in the long term (Goodman, 2004; Van Bockstaele et al., 2020; Waugh et al., 2020).

Refugees as targeted populations for the examination of PTSD and adequate intervention faced a challenge: it is not frequent to have a clear identification of refugees as the victim sample with specific sociodemographic traits. This also applies for asylum seekers. If some coping strategies failed for emotional regulation (other-blame and emotion-focused disengagement, for example), refugees' intervention should be better understood to avoid long-term PTSD (when refugees met PTSD, irrespective of their age) (Brea Larios, 2024; DeLapp & Williams, 2021; Doolan et al., 2017; Maier et al., 2022). As protector factors, the emotion-focused coping was the most suitable approach for intervention regarding PTSD treatment. Even attending to that positive association, a low number of studies found no association between emotion-focused coping strategies and low PTSD (Baluku et al., 2023; Grupp et al., 2022; McGinty et al., 2024). Problem-focused strategies are the most usually related to lower PTSD and should be considered in intervention and prevention methods of PTSD among displaced persons (Fino et al., 2020; Hooberman et al., 2010; Mathenson et al., 2007).

Regarding practical implications, promoting more adaptive coping strategies to handle stressors in daily life could improve refugees' psychological adjustment (Seglem et al., 2014). The evaluation of coping mechanisms in individuals exposed to potentially traumatic events is important, as failure or high dependence in coping strategies may predict PTSD. Mental health professionals should consider refugees coping mechanisms, accentuate the adaptive strategies for acculturation in the receiving country, and advise the utilization of effective coping approaches in specific contexts (Zbidat et al., 2020). This systematic review's findings draw attention to the importance of coping strategies when identifying high-risk individuals for PTSD and developing interventions for forcibly displaced individuals. The emphasis must be placed on diminishing the dependence on avoidant coping strategies. Interventions should prioritize the promotion of problem-focused coping and adaptive emotion-focused strategies, while also supplying essential resources to enable more adaptive coping methods.

Review limitations

One of the limitations is the absence of qualitative studies because we determined only quantitative studies to be considered in the eligibility criteria. However, we justified that qualitative research found during the search strategy was considered insufficient to understand more nuanced insights into the coping strategies employed by forcefully displaced individuals (mainly the international displaced – refugees and asylum seekers) and, therefore, their link with post-traumatic stress was not included in the systematic review.

Another limitation relates to the inclusion of mixed populations in the samples (refugees, asylum seekers, and internally displaced persons), which weakens the overall findings and complicates the generalization of results. Also, the synthesis and generalizability of the findings are significantly constrained by considerable geographical and cultural variability, alongside the heterogeneity of the tools employed to assess coping strategies and their theoretical conceptualizations in different studies. Focusing the tools, we are facing a gap of homogeneity to understand, in detail, how coping strategies are used by refugees and other displaced persons, and how PTSD is mitigated by those strategies. These are not quite understood because different diagnose instruments are measuring distinct coping (strategies, mechanisms, behaviors) and many cases are using coping and resilience in interchangeably way. About gender, we observed that few studies approached female subjects suffering PTSD resulted from war conflict and forced displacement. Alongside, gendered analysis was not able to be pursued for typology of coping that may distinguish males and females. Finally, it would be a limitation in our study review, to choose to avoid traditional meta-analysis. Considering the main goals of the study, coping strategies and the contexts were the priority.

CRediT authorship contribution statement

Sandra Figueiredo: Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Conceptualization. **Adelė Petravičiūtė:** Writing – review & editing, Writing – original draft, Visualization, Software, Formal analysis, Data curation.

Declaration of competing interest

The authors declare they have no conflict of interest.

Data availability statement

Data generated and analyzed during this study are included and clearly identified in this article.

Ethics approval statement

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. The Ethic Committee of Universidade Autónoma de Lisboa granted the approval as well the Foundation for Science and Technology.

Consent statement

The consents were delivered and ensuring the anonymous principle of data collection, treatment and dissemination (for academic purposes only). All the participants accorded with the consent statement.

Permission to reproduce material from other sources

There are no third partial sources used in this study, all the data and figures are original. Authors granted full permission, on request and citation, to the research community use/replicate this material.

Funding and Acknowledgements

This work was funded by national funds through FCT - Fundação para a Ciência e a Tecnologia (Foundation for Science and Technology) - as part of the project CIP/UAL – Ref. UIDB/04345/2020; and the Psychology Research Centre (CIP) of Universidade Autónoma de Lisboa/ Universidade do Algarve.

References

Aarethun, V., Sandal, G. M., Guribye, E., Markova, V., & Bye, H. H. (2021). Explanatory models and help-seeking for symptoms of PTSD and depression among Syrian refugees. *Social Science & Medicine, 277*, Article 113889. https://doi.org/10.1016/j.socscimed.2021.113889

Ai, A. L., Tice, T. N., Huang, B., & Ishisaka, A. (2005). Wartime faith-based reactions among traumatized Kosovar and Bosnian refugees in the United States. *Mental Health, Religion & Culture, 8*(4), 291–308. https://doi.org/10.1080/13674670412331304357

Ai, A. L., Tice, T. N., Whitsett, D. D., Ishisaka, T., & Chim, M. (2007). Posttraumatic symptoms and growth of Kosovar war refugees: The influence of hope and cognitive coping. *The Journal of Positive Psychology, 2*(1), 55–65. https://doi.org/10.1080/17439760601069341

Al Zoubi, S. (2023). When coping strategies become a way of life: A gendered analysis of Syrian refugees in Lebanon. *Oxford Development Studies, 51*(2), 126–144. https://doi.org/10.1080/13600818.2022.2096210

Aldwin, C. (2011). Stress and coping across the lifespan. In S. Folkman (Ed.), *Oxford library of psychology. The oxford handbook of stress, health, and coping* (pp. 15–34). New York, NY, US: Oxford University Press.

American Psychiatric Association, DSM-5 Task Force. (2013). *Diagnostic and statistical manual of mental disorders: DSM-5™* (5th ed.). American Psychiatric Publishing, Inc. https://doi.org/10.1176/appi.books.9780890425596

Araya, M., Chotai, J., Komproe, I. H., & de Jong, J. T. (2007). Gender differences in traumatic life events, coping strategies, perceived social support and sociodemographics among postconflict displaced persons in Ethiopia. *Social Psychiatry and Psychiatric Epidemiology, 42*(4), 307–315. https://doi.org/10.1007/s00127-007-0166-3

Bäärnhielm, S., & Schouler-Ocak, M. (2022). Training in cultural psychiatry: Translating research into improvements in mental health care for migrants. *Transcultural Psychiatry, 59*(2), 111–115. https://doi.org/10.1177/13634615221089384

Baluku, M. M., Nansubuga, F., Kibanja, G. M., Ouma, S., Balikoowa, R., Nansamba, J., Ruto, G., Kawooya, K., & Musanje, K. (2023). Associations of psychological inflexibility with posttraumatic stress disorder and adherence to covid-19 control measures among refugees in Uganda: The moderating role of coping strategies. *Journal of Contextual Behavioral Science, 28*, 278–288. https://doi.org/10.1016/j.jcbs.2023.05.002

Biggs, A., Brough, P., & Drummond, S. (2017). Lazarus and Folkman's psychological stress and coping theory. *The Handbook of Stress and Health: A Guide to Research and Practice*, 349–364. https://doi.org/10.1002/9781118993811.ch21

Blevins, C. A., Weathers, F. W., Davis, M. T., Witte, T. K., & Domino, J. L. (2015). The posttraumatic stress disorder checklist for DSM-5 (PCL-5): Development and initial psychometric evaluation. *Journal of Traumatic Stress, 28*(6), 489–498. https://doi.org/10.1002/jts.22059

Bogic, M., Njoku, A., & Priebe, S. (2015). Long-term mental health of war-refugees: A systematic literature review. *BMC International Health and Human Rights, 15*(1). https://doi.org/10.1186/s12914-015-0064-9

Brea Larios, D. (2024). Navigating wellness through integration: Coping strategies for depression among Syrian refugees in Norway. *BMC Psychology, 12*(1), 485. https://doi.org/10.1186/s40359-024-01987-0

Brewin, C. R., Rose, S., Andrews, B., Green, J., Tata, P., McEvedy, C., Turner, S., & Foa, E. B. (2002). Brief screening instrument for post-traumatic stress disorder. *British Journal of Psychiatry, 181*(2), 158–162. https://doi.org/10.1192/bjp.181.2.158

Bryant, R. A., Nickerson, A., Morina, N., & Liddell, B. (2023). Posttraumatic stress disorder in refugees. *Annual Review of Clinical Psychology, 19*, 413–436. https://doi.org/10.1146/annurev-clinpsy-080921-080359

Buhagar, D., Piedmont, R., & O'Grady, K. (2022). The virtue of religious faith and its relationship to posttraumatic stress disorder in victims of torture: The unique outcomes of men and women. *Mental Health, Religion & Culture, 25*(10), 991–1011. https://doi.org/10.1080/13674676.2022.2149718

Cardoso, J. B. (2018). Running to stand still: Trauma symptoms, coping strategies, and substance use behaviors in unaccompanied migrant youth. *Children and Youth Services Review, 92*, 143–152. https://doi.org/10.1016/j.childyouth.2018.04.018

Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology, 56*(2), 267–283. https://doi.org/10.1037//0022-3514.56.2.267

Carver, C. S. (1997). You want to measure coping but your protocol is too long: Consider the brief cope. *International Journal of Behavioral Medicine, 4*(1), 92–100. https://doi.org/10.1207/s15327558ijbm0401_6

Cloitre, M., Shevlin, M., Brewin, C. R., Bisson, J. I., Roberts, N. P., Maercker, A., Karatzias, T., & Hyland, P. (2018). The international trauma questionnaire: Development of a self-report measure of ICD-11 PTSD and complex PTSD. *Acta Psychiatrica Scandinavica, 138*(6), 536–546. https://doi.org/10.1111/acps.12956

Długosz, P. (2023). War trauma and strategies for coping with stress among Ukrainian refugees staying in Poland. *Journal of Migration and Health, 8*, Article 100196. https://doi.org/10.1016/j.jmh.2023.100196

DeLapp, R. C., & Williams, M. T. (2021). Preparing for racial microaggressions: The role of cognition and emotion in the proactive coping process of African American college students. *New Ideas in Psychology, 63*, Article 100897. https://doi.org/10.1016/j.newideapsych.2021.100897

Dell'Aquila, A., & Berle, D. (2023). Predictors of alcohol and substance use among people with post-traumatic stress disorder (PTSD): Findings from the NESARC-III study. *Social Psychiatry and Psychiatric Epidemiology, 58*(10), 1509–1522. https://doi.org/10.1007/s00127-023-02472-6

Denkinger, J. K., Rometsch, C., Engelhardt, M., Windthorst, P., Graf, J., Pham, P., Gibbons, N., Zipfel, S., & Junne, F. (2021). Longitudinal changes in posttraumatic stress disorder after resettlement among Yazidi female refugees exposed to violence. *JAMA Network Open, 4*(5). https://doi.org/10.1001/jamanetworkopen.2021.11120

Dhungana, S., Koirala, R., Ojha, S. P., & Thapa, S. B. (2022). Resilience and its association with post-traumatic stress disorder, anxiety, and depression symptoms in the aftermath of trauma: A cross-sectional study from Nepal. *SSM - Mental Health, 2*, Article 100135. https://doi.org/10.1016/j.ssmmh.2022.100135

Dixon-Woods, M. (2011). Using framework-based synthesis for conducting reviews of qualitative studies. *BMC Medicine, 9*, 1–2. https://doi.org/10.1186/1741-7015-9-39

Doolan, E. L., Bryant, R. A., Liddell, B. J., & Nickerson, A. (2017). The conceptualization of emotion regulation difficulties, and its association with posttraumatic stress symptoms in traumatized refugees. *Journal of Anxiety Disorders, 50*, 7–14. https://doi.org/10.1016/j.janxdis.2017.04.005

Downes, M. J., Brennan, M. L., Williams, H. C., & Dean, R. S. (2016). Development of a critical appraisal tool to assess the quality of cross-sectional studies (axis). *BMJ Open, 6*(12). https://doi.org/10.1136/bmjopen-2016-011458

Endler, N. S., & Parker, J. D. A. (1994). Assessment of multidimensional coping: Task, emotion, and avoidance strategies. *Psychological Assessment, 6*(1), 50–60. https://doi.org/10.1037/1040-3590.6.1.50

Ersahin, Z. (2022). Post-traumatic growth among Syrian refugees in Turkey: The role of coping strategies and religiosity. *Current Psychology, 41*(4), 2398–2407. https://doi.org/10.1007/s12144-020-00763-8

Figueiredo, S., & Silva, C. (2008). The psychosocial predisposition effects in second language learning: motivational profile in portuguese and catalan samples. *Porta Linguarum, 10*, 7–20. http://hdl.handle.net/10481/31776.

Figueiredo, S., Dierks, A., & Ferreira, R. (2024). Mental health screening in refugees communities: Ukrainian refugees and their post-traumatic stress disorder specificities. *European Journal of Trauma & Dissociation, 8*(1), Article 100382. https://doi.org/10.1016/j.ejtd.2024.100382

Finklestein, M., Laufer, A., & Solomon, Z. (2012). Coping strategies of Ethiopian immigrants in Israel: Association with PTSD and dissociation. *Scandinavian Journal of Psychology, 53*(6), 490–498. https://doi.org/10.1111/j.1467-9450.2012.00972.x

Fino, E., Mema, D., & Russo, P. M. (2020). War trauma exposed refugees and posttraumatic stress disorder: The moderating role of trait resilience. *Journal of Psychosomatic Research, 129*, Article 109905. https://doi.org/10.1016/j.jpsychores.2019.109905

Foa, E. B., Riggs, D. S., Dancu, C. V., & Rothbaum, B. O. (1993). Reliability and validity of a brief instrument for assessing post-traumatic stress disorder. *Journal of Traumatic Stress, 6*, 459–473. https://doi.org/10.1002/jts.2490060405

Foa, E. B., Cashman, L., Jaycox, L., & Perry, K. (1997). The validation of a self-report measure of posttraumatic stress disorder: The posttraumatic diagnostic scale. *Psychological Assessment, 9*(4), 445–451. https://doi.org/10.1037//1040-3590.9.4.445

Getnet, B., Medhin, G., & Alem, A. (2019). Symptoms of post-traumatic stress disorder and depression among Eritrean refugees in Ethiopia: Identifying direct, meditating and moderating predictors from path analysis. *BMJ Open, 9*(1). https://doi.org/10.1136/bmjopen-2017-021142

Gil, S. (2005). Coping style in predicting posttraumatic stress disorder among Israeli students. *Anxiety, Stress & Coping, 18*(4), 351–359. https://doi.org/10.1080/10615800500392732

Goodman, J. H. (2004). Coping with trauma and hardship among unaccompanied refugee youths from Sudan. *Qualitative Health Research, 14*(9), 1177–1196. https://doi.org/10.1177/1049732304265923

Grupp, F., Moro, M. R., Skandrani, S., & Mewes, R. (2022). Coping with trauma and symptoms of post-traumatic stress disorder: Exploring intentions and lay beliefs about appropriate strategies among asylum-seeking migrants from Sub-Saharan Africa in Germany. *International Journal of Environmental Research and Public Health, 19*(3), 1783. https://doi.org/10.3390/ijerph19031783

Hanley, A. W., de Vibe, M., Solhaug, I., Farb, N., Goldin, P. R., Gross, J. J., & Garland, E. L. (2021). Modeling the mindfulness-to-meaning theory's mindful reappraisal hypothesis: Replication with longitudinal data from a randomized controlled study. *Stress and Health, 37*(4), 778–789. https://doi.org/10.1002/smi.3035

Herroudi, L., Knuppel, I., & Blavier, A. (2024). Post-migration journey: Asylum, trauma and resilience, different trajectories–A comparison of the mental health and post-migration living difficulties of documented and undocumented migrants in Belgium. *International Journal of Social Psychiatry, 70*(1), 201–208. https://doi.org/10.1177/00207640231204212

Hobfoll, S. E., Dunahoo, C. L., & Monnier, J. (1993). *Preliminary test manual for the strategic approach to coping scale (SACS)*. Kent State University. Unpublished test manual.

Hooberman, J., Rosenfeld, B., Rasmussen, A., & Keller, A. (2010). Resilience in trauma-exposed refugees: The moderating effect of coping style on resilience variables. *American Journal of Orthopsychiatry, 80*(4), 557–563. https://doi.org/10.1111/j.1939-0025.2010.01060.x

Horyniak, D., Melo, J. S., Farrell, R. M., Ojeda, V. D., & Strathdee, S. A. (2016). Epidemiology of substance use among forced migrants: a global systematic review. *PLoS one, 11*(7), Article e0159134. https://doi.org/10.1371/journal.pone.0159134

Huijts, I., Kleijn, W. C., van Emmerik, A. A., Noordhof, A., & Smith, A. J. (2012). Dealing with man-made trauma: The relationship between coping style, posttraumatic stress, and quality of life in resettled, traumatized refugees in the Netherlands. *Journal of Traumatic Stress, 25*(1), 71–78. https://doi.org/10.1002/jts.21665

Isham, A., Morgan, G., & Kemp, A. H. (2023). Nurturing wellbeing amidst the climate crisis: On the need for a focus on wellbeing in the field of climate psychology. *Frontiers in Psychology, 14*, Article 1205991. https://doi.org/10.3389/fpsyg.2023.1205991

Jenzer, T., Meisel, S. N., Blayney, J. A., Colder, C. R., & Read, J. P. (2020a). Reciprocal processes in trauma and coping: Bidirectional effects over a four-year period. *Psychological Trauma: Theory, Research, Practice, and Policy, 12*(2), 207. https://doi.org/10.1037/tra0000500

Jenzer, T., Meisel, S. N., Blayney, J. A., Colder, C. R., & Read, J. P. (2020b). Reciprocal processes in trauma and coping: Bidirectional effects over a four-year period. *Psychological Trauma: Theory, Research, Practice, and Policy, 12*(2), 207–218. https://doi.org/10.1037/tra0000500

Jones, M. L. (2004). Application of systematic review methods to qualitative research: Practical issues. *Journal of Advanced Nursing, 48*(3), 271–278. https://doi.org/10.1111/j.1365-2648.2004.03196.x

Jore, T., Oppedal, B., & Biele, G. (2020). Social anxiety among unaccompanied minor refugees in Norway. The association with pre-migration trauma and post-migration acculturation related factors. *Journal of Psychosomatic Research, 136*, Article 110175. https://doi.org/10.1016/j.jpsychores.2020.110175

Kanal, M., & Rottmann, S. B. (2021). Everyday agency: Rethinking refugee women's agency in specific cultural contexts. *Frontiers in Psychology, 12*, Article 726729. https://doi.org/10.3389/fpsyg.2021.726729

Kane, J. C., Ventevogel, P., Spiegel, P., Bass, J. K., van Ommeren, M., & Tol, W. A. (2014). Mental, neurological, and substance use problems among refugees in primary health care: Analysis of the health information system in 90 refugee camps. *BMC Medicine, 12*(1). https://doi.org/10.1186/s12916-014-0228-9

Khailenko, O., & Bacon, A. M. (2024). Resilience, avoidant coping and post-traumatic stress symptoms among female Ukrainian refugees and internally displaced people. *International Journal of Social Psychiatry, 70*(6), 1164–1174. https://doi.org/10.1177/00207640241264662

Khan, J., & Batool, B. (2023). Psychological resilience among refugee populations: Challenges and protective factors. *Journal Of Psychology, Health And Social Challenges, 1*(01), 84–98. https://jphasc.com/index.php/Journal/article/view/40.

Khawaja, N. G., White, K. M., Schweitzer, R., & Greenslade, J. (2008). Difficulties and coping strategies of Sudanese refugees: A qualitative approach. *Transcultural Psychiatry, 45*(3), 489–512. https://doi.org/10.1177/1363461508094678

Kleijn, W. C., Van Heck, G. L., & Van Waning, A. (2000). Ervaringen met een Nederlandse bewerking van de COPE copingvragenlijst. De COPE-EASY. *Gedrag en Gezondheid, 24*, 213–225.

Knipscheer, J. W., Sleijpen, M., Mooren, T., ter Heide, F. J., & van der Aa, N. (2015). Trauma exposure and refugee status as predictors of mental health outcomes in treatment-seeking refugees. *BJPsych Bulletin, 39*(4), 178–182. https://doi.org/10.1192/pb.bp.114.047951

Konstantinov, V., Reznik, A., & Isralowitz, R. (2023). The impact of the Russian–Ukrainian war and relocation on civilian refugees. *Journal of Loss and Trauma, 28*(3), 267–269. https://doi.org/10.1080/15325024.2022.2093472

Kurapov, A., Kalaitzaki, A., Keller, V., Danyliuk, I., & Kowatsch, T. (2023). The mental health impact of the ongoing Russian-Ukrainian war 6 months after the Russian invasion of Ukraine. *Frontiers in Psychiatry, 14*, Article 1134780. https://doi.org/10.3389/fpsyt.2023.1134780

Kurapov, A., Balashevych, O., Tsurikova, H., & Dubynskyi, O. (2022). *Reasons why Ukrainians Continue or Stop Interacting with Russian Culture as a Result of a Russian-Ukrainian War*.

Lazarus, R. S. (1984). *Stress, Appraisal, and Coping, 464*. Springer.

Lazarus, R. S. (1993a). From psychological stress to the emotions: A history of changing outlooks. *Annual Reviews Psychology, 44*, 1–21. https://doi.org/10.1146/annurev.ps.44.020193.000245

Lazarus, R. S. (1993b). Coping theory and research: Past, present, and future. *Psychosomatic Medicine, 55*(3), 234–247. https://doi.org/10.1097/00006842-199305000-00002

Lechner-Meichsner, F., Comtesse, H., & Olk, M. (2024). Prevalence, comorbidities, and factors associated with prolonged grief disorder, posttraumatic stress disorder and complex posttraumatic stress disorder in refugees: A systematic review. *Conflict and Health, 18*(1), 32. https://doi.org/10.1186/s13031-024-00586-5

Lenferink, L. I., de Keijser, J., Smid, G. E., Djelantik, A. M. J., & Boelen, P. A. (2017). Prolonged grief, depression, and posttraumatic stress in disaster-bereaved individuals: Latent class analysis. *European Journal of Psychotraumatology, 8*(1), Article 1298311. https://doi.org/10.1080/20008198.2017.1298311

Littleton, H., Horsley, S., John, S., & Nelson, D. V. (2007). Trauma coping strategies and psychological distress: a meta-analysis. *Journal of Traumatic Stress: Official Publication of the International Society for Traumatic Stress Studies, 20*(6), 977–988. https://doi.org/10.1002/jts.20276

Lode, K., Larsen, J. P., Bru, E., Klevan, G., Myhr, K. M., & Nyland, H. (2007). Patient information and coping styles in multiple sclerosis. *Multiple Sclerosis Journal, 13*(6), 792–799. https://doi.org/10.1177/1352458506073482

Lucas, P. J., Baird, J., Arai, L., Law, C., & Roberts, H. M. (2007). Worked examples of alternative methods for the synthesis of qualitative and quantitative research in systematic reviews. *BMC Medical Research Methodology, 7*, 1–7. https://doi.org/10.1186/1471-2288-7-4

Lushchak, O., Velykodna, M., Bolman, S., Strilbytska, O., Berezovskyi, V., & Storey, K. B. (2024). Prevalence of stress, anxiety, and symptoms of post-traumatic stress disorder among Ukrainians after the first year of Russian invasion: A nationwide cross-sectional study. *The Lancet Regional Health–Europe, 36*.

Maier, K., Konaszewski, K., Skalski, S. B., Büssing, A., & Surzykiewicz, J. (2022). Spiritual needs, religious coping and mental wellbeing: A cross-sectional study among migrants and refugees in Germany. *International Journal of Environmental Research and Public Health, 19*(6), 3415. https://doi.org/10.3390/ijerph19063415

Maria, M., Dimitra, T., Mary, G., Stella, K., Athanasios, N., & Sarafis, P. (2021). Depression, resilience and post traumatic stress disorder (PTSD) in asylum-seeker war refugees. *Materia Socio-Medica, 33*(1), 26–29. https://doi.org/10.5455/msm.2021.33.26-29

Matheson, K., & Anisman, H. (2003). Systems of coping associated with dysphoria, anxiety and depressive illness: A multivariate profile perspective. *Stress, 6*, 223–234. https://doi.org/10.1080/10253890310001594487

Matheson, K., Jorden, S., & Anisman, H. (2007). Relations between trauma experiences and psychological, physical and neuroendocrine functioning among Somali refugees: Mediating role of coping with acculturation stressors. *Journal of Immigrant and Minority Health, 10*(4), 291–304. https://doi.org/10.1007/s10903-007-9086-2

Mazhak, I., Paludo, A. C., & Sudyn, D. (2024). Self-reported health and coping strategies of Ukrainian female refugees in the Czech Republic. *European Societies, 26*(2), 411–437. https://doi.org/10.1080/14616696.2023.2203230

McGinty, G., Fox, R., Roberts, B., Makhashvili, N., Javakhishvili, J. D., & Hyland, P. (2023). Post-traumatic stress disorder, complex post-traumatic stress disorder, and coping styles among internally displaced Ukrainians. *Journal of Loss and Trauma, 28*(7), 571–587. https://doi.org/10.1080/15325024.2023.2217002

McGinty, G., Fox, R., & Hyland, P. (2024). Assessing prevalence, validity, and correlates of ICD-11 posttraumatic stress disorder and complex posttraumatic stress disorder in Ireland. *Psychological Trauma: Theory, Research, Practice, and Policy, 16*(5), 784. https://doi.org/10.1037/tra0001472

Mercado, A., Venta, A., Morales, F., Palomin, A., Garcini, L., Silva, M., & Domenech Rodríguez, M. M. (2024). Trauma in the American asylum process: Experiences of immigrant families under the migrant protection protocols. *Psychological Trauma: Theory, Research, Practice, and Policy, 16*(Suppl 2). https://doi.org/10.1037/tra0001368

Michultka, D. (2009). Mental health issues in new immigrant communities. In F. Chang-Muy, & E. P. Congress (Eds.), *Social work with immigrants and refugees: Legal issues, clinical skills and advocacy* (pp. 135–172). Springer Publishing Company.

Mikutta, C., Schmid, J. J., & Ehlert, U. (2022). Resilience and post-traumatic stress disorder in the Swiss alpine rescue association. *Frontiers in Psychiatry, 13*, Article 780498. https://doi.org/10.3389/fpsyt.2022.780498

Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Preferred reporting items for systematic reviews and meta-analyses: The Prisma statement. *PLoS Medicine, 6*(7). https://doi.org/10.1371/journal.pmed.1000097

Mollica, R. F., Caspi-Yavin, Y., Bollini, P., Truong, T., Tor, S., & Lavelle, J. (1992). The harvard trauma questionnaire: Validating a cross-cultural instrument for measuring torture, trauma, and posttraumatic stress disorder in Indochinese refugees. *The Journal of Nervous and Mental Disease, 180*(2), 111–116.

Nissen, A., Hynek, K. A., Scales, D., Hilden, P. K., & Straiton, M. (2022). Chronic pain, mental health and functional impairment in adult refugees from Syria resettled in Norway: A cross-sectional study. *BMC Psychiatry, 22*(1), 571. https://doi.org/10.1186/s12888-022-04200-x

Obbarius, N., Fischer, F., Liegl, G., Obbarius, A., & Rose, M. (2021). A modified version of the transactional stress concept according to Lazarus and Folkman was confirmed in a psychosomatic inpatient sample. *Frontiers in Psychology, 12*, Article 584333. https://doi.org/10.3389/fpsyg.2021.584333

Olufadewa, I. I., Adesina, M. A., Oladele, R. I., & Ayorinde, T. A. (2022). Watching my family being killed by terrorists made me really depressed": Mental health experiences, challenges and needed support of young internally displaced persons in Northern Nigeria. *Journal of Migration and Health, 6*, Article 100121. https://doi.org/10.1016/j.jmh.2022.100121

Pargament, K. I. (1999). Religious/spiritual coping. *Multidimensional measurement of religiousness/spirituality for use in health research: A publication of John Fetzer foundation*. Kalamazoo, MI: Fetzer Institute.

Pargament, K. I. (2003). Religious/spiritual coping. *Multidimensional measurement of religiousness/spirituality of use in health research: A report of the Fetzer institute/national institute on aging working group* (pp. 43–53). Fetzer Institute.

Peevey, N., Flores, E., & Seguin, M. (2022). Common mental disorders and coping strategies amongst internally displaced Colombians: A systematic review. *Global*

Public Health, 17(12), 3440–3454. https://doi.org/10.1080/17441692.2022.2049343
Prins, A., Ouimette, P., Kimerling, R., Camerond, R. P., Hugelshofer, D. S., Shaw-Hegwer, J., Thrailkill, A., Gusman, F. D., & Sheikh, J. I. (2004). The primary care PTSD screen (PC–PTSD): Development and operating characteristics. *Primary Care Psychiatry, 9*(1), 9–14. https://doi.org/10.1185/135525703125002360
Randles, R., & Finnegan, A. (2023). Guidelines for writing a systematic review. *Nurse Education Today, 125*, Article 105803. https://doi.org/10.1016/j.nedt.2023.105803
Rayes, D., Karnouk, C., Churbaji, D., Walther, L., & Bajbouj, M. (2021). Faith-based coping among Arabic-speaking refugees seeking mental health services in Berlin, Germany: An exploratory qualitative study. *Frontiers in Psychiatry, 12*, Article 595979. https://doi.org/10.3389/fpsyt.2021.595979
Renner, W., & Salem, I. (2009). Post-traumatic stress in asylum seekers and refugees from Chechnya, Afghanistan, and West Africa: Gender differences in symptomatology and coping. *International Journal of Social Psychiatry, 55*(2), 99–108. https://doi.org/10.1177/0020764008092341
Renner, A., Hoffmann, R., Nagl, M., Roehr, S., Jung, F., Grochtdreis, T., … Kersting, A. (2020). Syrian refugees in Germany: Perspectives on mental health and coping strategies. *Journal of Psychosomatic Research, 129*, Article 109906. https://doi.org/10.1016/j.jpsychores.2019.109906
Rzepka, I., Zehetmair, C., Roether, E., Kindermann, D., Cranz, A., Junne, F., Friederich, H.-C., & Nikendei, C. (2022). Impact of and coping with post-traumatic symptoms of refugees in temporary accommodations in Germany: A qualitative analysis. *International Journal of Environmental Research and Public Health, 19*(17), Article 10893. https://doi.org/10.3390/ijerph191710893
Schäfer, S. K., Kunzler, A. M., Lindner, S., Broll, J., Stoll, M., Stoffers-Winterling, J., & Lieb, K. (2023). Transdiagnostic psychosocial interventions to promote mental health in forcibly displaced persons: A systematic review and meta-analysis. *European Journal of Psychotraumatology, 14*(2), Article 2196762. https://doi.org/10.1080/20008066.2023.2196762
Scholaske, L., Wadhwa, P. D., & Entringer, S. (2021). Acculturation and biological stress markers: A systematic review. *Psychoneuroendocrinology, 132*, Article 105349. https://doi.org/10.1016/j.psyneuen.2021.105349
Seglem, K. B., Oppedal, B., & Roysamb, E. (2014). Daily hassles and coping dispositions as predictors of psychological adjustment. *International Journal of Behavioral Development, 38*(3), 293–303. https://doi.org/10.1177/0165025414520807
Shalev, A., Liberzon, I., & Marmar, C. (2017). Post-traumatic stress disorder. *New England Journal of Medicine, 376*(25), 2459–2469. https://doi.org/10.1056/nejmra1612499
Snijders, C., Pries, L.-K., Sgammeglia, N., Al Jowf, G., Youssef, N. A., de Nijs, L., Guloksuz, S., & Rutten, B. P. F. (2018). Resilience against traumatic stress: Current developments and future directions. *Frontiers in Psychiatry, 9*, 676. https://doi.org/10.3389/fpsyt.2018.00676
Sommer, J. L., El-Gabalawy, R., & Mota, N. (2019). Understanding the association between posttraumatic stress disorder characteristics and physical health conditions: A population-based study. *Journal of Psychosomatic Research, 126*, Article 109776. https://doi.org/10.1016/j.jpsychores.2019.109776
Stanisławski, K. (2019). The coping circumplex model: An integrative model of the structure of coping with stress. *Frontiers in Psychology, 10*. https://doi.org/10.3389/fpsyg.2019.00694
Stephenson, E., & DeLongis, A. (2020). Coping strategies. *The Wiley encyclopedia of Health Psychology* (pp. 55–60). https://doi.org/10.1002/9781119057840.ch50.
Taufik, T., & Ibrahim, R. (2020). Making sense of disaster: Affinity to god as a coping strategy of Muslim refugees in Central Sulawesi. *Journal of Loss and Trauma, 25*(1), 61–73. https://doi.org/10.1080/15325024.2019.1655256
Theisen-Womersley, G. (2021). *Trauma and resilience among displaced populations*. https://doi.org/10.1007/978-3-030-67712-1.
Tobin, D. L., Holroyd, K. A., Reynolds, R. V., & Wigal, J. K. (1989). The hierarchical factor structure of the coping strategies inventory. *Cognitive Therapy and Research, 13*(4), 343–361. https://doi.org/10.1007/bf01173478
UNHCR. (2024b). *Refugee data finder*. From https://www.unhcr.org/refugee-statistics/.
Usama, E. A., Fathi, A., Vasileva, M., Petermann, F., & Reinelt, T. (2021). Acculturation orientations and mental health when facing post-migration stress: Differences between unaccompanied and accompanied male Middle Eastern refugee adolescents, first-and second-generation immigrant and native peers in Germany. *International Journal of Intercultural Relations, 82*, 232–246. https://doi.org/10.1016/j.ijintrel.2021.04.002
Van Bockstaele, B., Atticciati, L., Hiekkaranta, A. P., Larsen, H., & Verschuere, B. (2020). Choose change: Situation modification, distraction, and reappraisal in mild versus intense negative situations. *Motivation and Emotion, 44*(4), 583–596. https://doi.org/10.1007/s11031-019-09811-8
Waugh, C. E., Shing, E. Z., & Furr, R. M. (2020). Not all disengagement coping strategies are created equal: Positive distraction, but not avoidance, can be an adaptive coping strategy for chronic life stressors. *Anxiety, Stress, & Coping, 33*(5), 511–529. https://doi.org/10.1080/10615806.2020.1755820. References (Included Studies).
Weiss, D. S., & Marmar, C. R. (1995). The impact of events scale—Revised. In J. Wilson, & T. Keane (Eds.), *Assessing psychological trauma and PTSD*. New York: Guilford Press.
Weiss, D. S. (2007). The impact of event scale: Revised. In J. P. Wilson, & C. S. Tang (Eds.), *Cross-cultural assessment of psychological trauma and PTSD. International and cultural psychology series* (pp. 219–238). Springer. https://doi.org/10.1007/978-0-387-70990-1_10.
Wills, T. A. (1996). Modes and families of coping: An analysis of downward comparison in the structure of other cognitive and behavioral mechanisms. In B. P. Bunk, & F. X. Gibbons (Eds.), *Health, coping, and well-being*. Mahwah, NJ: Lawrence Erlbaum.
Zbidat, A., Georgiadou, E., Borho, A., Erim, Y., & Morawa, E. (2020). The perceptions of trauma, complaints, somatization, and coping strategies among Syrian refugees in Germany—A qualitative study of an at-risk population. *International Journal of Environmental Research and Public Health, 17*(3), 693. https://doi.org/10.3390/ijerph17030693