A Systematic Review of Psychological Group Interventions for Adults with Refugee Backgrounds in Resettlement Countries: Development of a Stepped Care Approach to Mental Health Treatment

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Declaration

This dissertation contains no material which has been accepted for the award of any other degree or diploma in any University, and, to the best of my knowledge, contains no materials previously published except where due reference is made. I give permission for the digital version of my dissertation to be made available on the web, via the University's digital research repository, the Library Search, and also through web search engines, unless permission has been granted by the School to restrict access for a period of time.

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Abstract

The number of refugees globally has increased and due to exposure to trauma and postmigration stressors, many are in need of appropriate mental health care. ***Objective:*** *While previous systematic reviews have focused on individual interventions for refugees, the current study aims to contribute to the literature by systematically reviewing the effectiveness of group and community-based interventions, to provide insight into ways current treatments can be scaled and integrated into stepped-care interventions.* ***Method:*** *A systematic review was conducted. In November 2020, PsycINFO, PubMed, Scopus, Embase and CINAHL were systematically searched and findings were analysed using narrative thematic analysis.* ***Results:*** *Four key themes were identified in the literature including: a) the benefits and challenges of group-based interventions b) effectiveness of group-based interventions and c) how to implement group-based treatments effectively when working with refugees.* ***Conclusion:*** *In general, while groups were not typically seen as a replacement for individual therapy, the included studies suggested the complementary value of group modalities, as well as their effectiveness as an early access intervention. Ultimately, the existing body of research concerning group interventions indicates that treatments delivered in a group format have utility and scalability and should be considered for integration into stepped models of care for people with refugee backgrounds.*

Keywords

systematic review; stepped-care; refugees; group interventions; psychological interventions; mental health

What is already known on this topic

1. Stepped care enhances access to mental health care
2. Refugees have higher vulnerability to developing mental illness and lower access to services
3. Group programs are more culturally appropriate for refugees

What this research adds

1. Stepped care should include group-based and community interventions at the lower tiers of stepped care models
2. Group interventions are generally effective and accessible for refugees
3. To enhance accessibility, practitioners should consider providing transport and childcare as part of facilitating group-based interventions

Introduction

A significant body of previous literature indicates that while many people with refugee backgrounds have remarkable resilience and adaptive skills (Simich & Andermann, 2014), they face significant obstacles to maintaining positive mental health. These include exposure to war, experiences of torture and trauma, and challenges in resettlement such as family separation, language barriers, discrimination, acculturation stressors, and social isolation (Due, Green, & Ziersch, 2020; Li, Liddell, & Nickerson, 2016). As a result, people with refugee backgrounds are more vulnerable to mental illness; for example, a review by Turrini et al. (2017) reported one in three people with refugee backgrounds experience depression, anxiety or post-traumatic stress disorder (PTSD). Similarly, a systematic review by Bogic, Njoku, and Priebe (2015) of long-term mental health outcomes in refugees found generally high prevalence rates of depression, PTSD and other anxiety disorders five years or longer after displacement.

Given this heightened vulnerability to mental ill-health, there is an increased need for appropriate and effective psychological treatments for people with refugee backgrounds (Hodes, Anagnostopoulos, & Skokauskas, 2018), and particularly mental healthcare that is

accessible, given the well-known barriers to mental health service access for refugees (Byrow, Pajak, Specker, & Nickerson, 2020; Hynie, 2018). One way to enhance accessibility is through a stepped care approach to treatment, where group and community-based interventions form an integral 'step' or component of care (Cornish, 2020). Currently, while there is growing evidence for stepped care in mental health service delivery in the general population, there is very little research on stepped care interventions for people with refugee backgrounds and particularly for group and community-based interventions (Böge et al., 2020; Maehder, Löwe, & Weigel, 2018). A literature review of group interventions with survivors of torture and severe violence by Bunn et al. (2018) indicated group treatment as an effective approach in providing care to larger groups of survivors. The current study aimed to add to these findings. Specifically, this research aimed to provide a systematic literature review of the effectiveness of group-based psychological interventions with people with refugee backgrounds that might be incorporated into stepped care models of delivery.

Background

Terminology

For brevity, the term 'refugee' is used in this paper to describe people with refugee backgrounds, with refugees defined as humanitarian migrants who meet the UNHCR criteria for refugee status (United Nations High Commisioner for Refugees [UNHCR], 1951). Additionally, the term 'asylum seeker' is used to describe "a person who has fled from his or her own country due to fear of persecution and has applied for (legal and physical) protection in another country but has not yet had their claim for protection assessed" (UNHCR, 1951) .

It is important to note that this paper focuses on refugees, and asylum seekers were excluded from the search, since in many countries asylum seekers are ineligible for health services (Spike, Smith, & Harris, 2011).

Previous literature

In terms of previous research related to effectiveness of mental health interventions for refugees, a systematic review of social, psychological and welfare interventions with torture survivors, many of whom were refugees (Patel, Kellezi, & Williams), reported moderate effects - maintained at 6-month follow-up - for Narrative Exposure Therapy (NET) and Cognitive Behaviour Therapy (CBT) in treatment of PTSD symptoms. These findings are supported by other reviews (e.g. see Slobodin & de Jong, 2015; Tribe, Sendt, & Tracy, 2019). Additionally, a recent meta-analysis by Turrini et al. (2019) of psychosocial interventions in asylum seekers and refugees supported the effectiveness of CBT in reducing PTSD symptom severity for refugees and also found Eye Movement Desensitisation and Reprocessing (EMDR) effective in reducing depression symptoms. Trauma-focused psychotherapy (TFP) has also been indicated as effective, albeit supported by a small number of studies (Nosè et al., 2017). Finally, an overview of systematic reviews on mental health promotion, prevention, and treatment of common mental disorders for refugees, asylum seekers, and internally displaced persons by Uphoff et al. (2020) identified CBT and NET and a range of different integrative and interpersonal therapies as the most frequently used interventions.

Stepped-care refers to a model of service delivery in which individuals are offered lower intensity options before progressing to more intensive interventions if there is no improvement in mental health outcomes; with the aim of improving accessibility of mental health support (Cornish, 2020). Stepped-care is an evidence-based model of care that has empirical support; Pottie et al. (2011)'s research offered a stepped-care approach in their clinical guidelines for refugees and immigrants. Generally, psychoeducation and group interventions are proposed as early level care options, with more resource and cost-intensive steps such as individual psychotherapy higher in the care hierarchy (Cornish, 2020). Stepped-care models may be particularly suitable for refugees and culturally diverse populations since they can increases access to mental health care by reducing potential

barriers to engaging in individualistic treatments. There is currently little research regarding the use of stepped care models of mental healthcare for refugees. German researchers have proposed one model, although evaluation is underway and not yet published (Böge et al., 2020; Schneider, Bajbouj, & Heinz, 2017).

However, there is good evidence for group interventions in culturally diverse populations more generally in terms of reductions in mental illnesses such as anxiety, depression and PTSD. Examples in Australia include a music therapy group in a cross-cultural aged care sample (Vannie & Denise, 2011), a group CBT intervention with war affected young migrants (Ooi et al., 2016), and a community-based mindfulness program for Arabic and Bangla-speaking migrants (Blignault, Saab, Woodland, Mannan, & Kaur, 2021). International research has also demonstrated effectiveness of group interventions for culturally diverse groups, including a CBT support group for Latina migrant workers living in the United States (Hovey, Hurtado, & Seligman, 2014) and group sandplay therapy for migrant women living in South Korea (Jang & Kim, 2012).

As such, stepped-care may offer more flexibility for mental health interventions for refugees, including the use of group interventions at lower levels of the model (Mitschke, Praetorius, Kelly, Small, and Kim (2017). Thus, group-based interventions may present alternatives to individually administered treatments while maintaining cultural safety for refugee service users. This systematic review of the literature therefore aimed to collate existing evidence concerning group interventions for refugees.

Method

Protocol registration

This systematic review was registered with the International Prospective Register of Systematic Reviews (PROSPERO No. CRD42020214814).

Selection strategy

The search strategy for this systematic review was developed using the PICO method (Methley, Campbell, Chew-Graham, McNally, & Cheraghi-Sohi, 2014). All empirical,

peer-review studies with primary data were included. Studies were required to be published in English. However, in two cases, the authors of papers not published in English but which seemed relevant were contacted to try and obtain English translated versions, but this did not lead to any response.

The population of interest (P) was adult refugee participants and/or mental health service providers, defined as psychologists, psychiatrists, social workers, occupational therapists, mental health nurses, and cultural or peer support workers reporting on the experiences of adult refugees in group therapy. Articles were excluded if participants were aged under 18. If samples included asylum seekers, refugee data had to be disaggregated. Where studies included both refugee and asylum seeker participants, authors (n = 9) were contacted to see if there was refugee-specific data available. Two authors responded (Fish & Fakoussa, 2018; Logie, Lacombe-Duncan, Lee-Foon, Ryan, & Ramsay, 2016), however refugee specific data was not available and the studies were excluded.

Group-based psychological and psychosocial interventions were the intervention or exposure (I). Again, if studies included both individual and group interventions, group data had to be disaggregated; one paper fell into this category and the authors (Karageorge, Rhodes, & Gray, 2018) were contacted. However, they did not respond and the study was excluded.

There was no comparison (C) group, while the outcome (O) component related to effectiveness. Specifically, studies needed to explore the effectiveness (or perceptions of effectiveness, in the case of qualitative studies) of group interventions for refugees in relation to psychological or psychosocial wellbeing, or report on the barriers and facilitators to accessing group interventions.

Database searches

In November 2020, PsycINFO, PubMed, Scopus, Embase and CINAHL were systematically searched for papers published in English between 1 January 2010 and 24 November 2020. This timeframe was chosen for recency of evidence, and also because two

major systematic reviews on the topic were published in 2010; namely Murray, Davidson, and Schweitzer (2010)'s review of refugee mental health interventions following resettlement and Crumlish and O'Rourke (2010)'s review of treatments for PTSD among asylum-seekers and refugees.

Search strategies were developed in consultation with a university research librarian and key terms related to the population, disorder and intervention were tailored to each database. Reference checks of included studies and relevant systematic reviews were also undertaken; no further studies were identified through this process.

For an example of the search strategy used, see Table 1.

Table 1

PubMed Search Strategy

Population terms	"refugees"[mh] OR "transients and migrants"[mh] OR refugee*[tiab] OR asylum seek*[tiab] OR political refugee*[tiab] OR political asylum[tiab] OR displaced people[tiab] OR displaced person*[tiab] OR humanitarian migrant*[tiab] OR humanitarian immigrant*[tiab] OR humanitarian arrival*[tiab] OR humanitarian visa*[tiab]
Disorder terms	"mental disorders"[mh] OR "trauma and stressor related disorders"[mh] OR "psychological trauma"[mh] OR "guilt"[mh] OR "quality of life"[mh] OR "mental health"[mh] OR "stress, psychological"[mh] OR "life stress"[mh] OR "psychological distress"[mh] OR post-traumatic stress[tiab] OR post-traumatic stress disorder*[tiab] OR PTSD[tiab] OR complex PTSD[tiab] OR anxiet*[tiab] OR panic disorder*[tiab] OR phobi*[tiab] OR dissociative disorder*[tiab] OR dissociation[tiab] OR somatization[tiab] OR somatisation[tiab] OR somatoform disorder*[tiab] OR conversion disorder*[tiab] OR adjustment disorder*[tiab] OR stress disorder*[tiab] OR trauma*[tiab] OR major depression*[tiab] OR major depressive disorder*[tiab] OR recurrent depression[tiab] OR dysthymia[tiab] OR persistent depressive disorder*[tiab] OR long-term depression[tiab] OR neuronal depression[tiab] OR guilt[tiab] OR shame[tiab] OR survivor guilt[tiab] OR death anxiet*[tiab] OR mental disorder*[tiab] OR mental illness*[tiab] OR distress*[tiab] OR trauma-exposed[tiab] OR wellbeing[tiab] OR well-being[tiab] OR quality of life[tiab] OR mental health[tiab] OR stress[tiab] OR psychological stress[tiab] OR psychological distress[tiab] OR socioemotional[tiab] OR well-being[tiab]
Intervention terms	"psychology"[mh] OR "psychotherapy"[mh] OR OR "mind-body therapies"[mh] OR "self-help groups"[mh] OR treatment*[tiab] OR therap*[tiab] OR intervention*[tiab] OR psychotherap*[tiab] OR psycholog*[tiab] OR psychosocial[tiab] OR trauma-informed[tiab] OR support group[tiab] OR peer support[tiab] OR cross-cultural counsel*[tiab] OR cultural sensitivity[tiab] OR women's group[tiab] OR men's group[tiab] OR group counsel*[tiab] OR peer mentor*[tiab] OR cultural peer support[tiab] OR stepped-care[tiab] OR mind-body therap*[tiab] OR mind-body intervention*[tiab] OR mind-body treatment*[tiab] OR self-help group*[tiab]

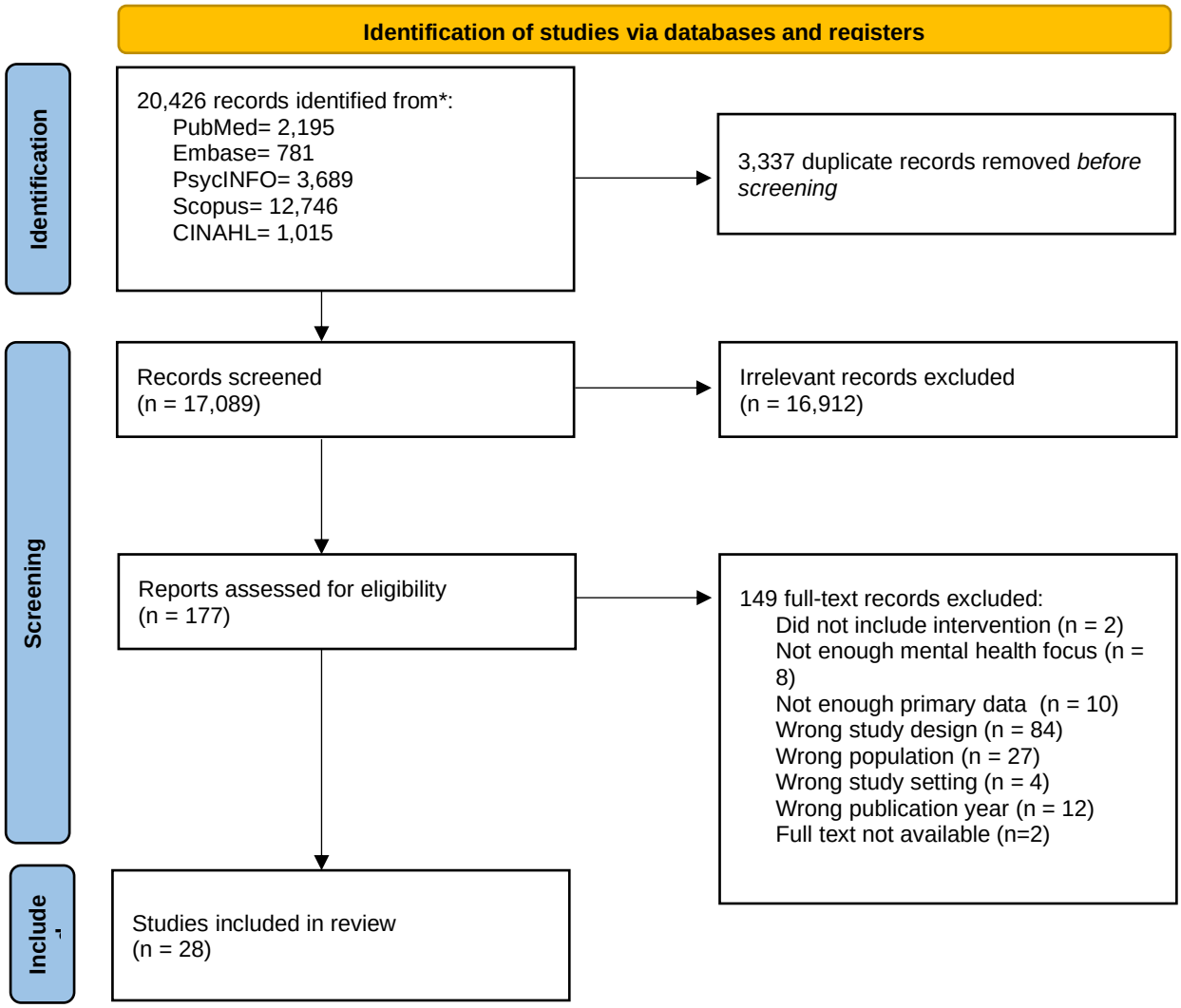
Study Selection

The search strategy resulted in identification of 20,426 articles. After duplicates were removed, there were 17,089 unique papers. The first author (TG) undertook preliminary title

and abstract screening using Covidence software to manually screen the papers against the inclusion criteria. Papers that did not meet inclusion criteria were excluded (n = 16,912). One hundred and seventy seven potentially eligible papers were identified, and their full-texts screened against the inclusion criteria, in collaboration with the second author (CD). This process resulted in 28 relevant papers. Discrepancies were resolved through discussion between the two reviewers. Figure 1 depicts the study selection process.

Figure 1

PRISMA Flow Diagram outlining study selection (Page et al., 2021)



Quality Assessment

Issues of quality in the reported papers were considered with reference to the Mixed Methods Appraisal Tool (Hong et al., 2018) consistent with systematic review protocols. The MMAT allows an appraisal of quality based on the following criteria: clarity of the research questions, whether the data allows consideration of the research questions and then (depending on the study methodology), questions related to sampling, measurements, and data analysis. Article quality was only considered with respect to the papers as they appeared in their published form. Authors were not contacted for further information about the quality of their studies. It is understood that some of the reported quality issues may relate to journal restrictions such as word counts or reporting requirements.

Data extraction

Due to the diverse designs and aims of the studies, no meta-analysis was performed. Instead, results of the studies were synthesised using inductive thematic analysis. This was performed according to Finlayson and Dixon (2008)'s guidelines for data extraction. Consistent with this methodology, the first author explored the findings of the included studies for patterns of meaning, following which relevant findings were collated in an Excel spreadsheet. Subsequently, both authors grouped the codes into subthemes and then into broader themes. These thematic groupings were formed based on the perceived fit of the coded data against the research question. Finally, themes were reviewed, refined and named by the first and second author.

Results

Twenty-eight peer-reviewed papers met the inclusion criteria.

Description of studies

Specific details of each of the studies can be found in Appendix 1, while Table 3 provides an overall summary of study characteristics.

Table 3

Overall summary of study characteristics

	Quantitative (N=12)	Qualitative (N=5)	Mixed-methods (N=11)	Total (N=28)
Year of Publication				
2010-2014	2	1	2	5
2015-2020	10	4	9	23
Region of study				
Australia	2	1	1	4
Denmark		1	2	3
Germany	3			3
Netherlands	1			1
South Korea	1			1
Sweden		1	1	2
United States	5	2	7	14
Informant group				
Refugees	11	5	8	24
Service providers			1	1
Refugees and service providers	1		2	3
Sample size				
1-20	3	2	4	9
21-40	3	3	3	9
41-60	2		2	4
61-80	2			2
81-100	1		1	2
100+	1		1	2
Outcome focus				
Therapeutic group	7		3	10
Health promotion group	4	1	6	11
Community-based intervention	1	4	2	7

The 28 studies comprised 12 quantitative, five qualitative and 11 mixed methods papers. Twenty-four studies included refugee participants, while one study included service providers only (Brochmann et al., 2019) and another three included a mixed sample of service providers and refugees (Hartwig & Mason, 2016; Im & Swan, 2020; Slewa-Younan et al., 2020). With respect to resettlement countries, all studies were conducted in high income countries, with most studies conducted in the United States (*n* = 14).

With regards to intervention modality, groups were categorised as either: therapeutic groups (incorporating psychological therapeutic modalities), health promotion groups or community-based interventions. Of the 10 therapeutic groups, modalities included CBT, culturally-adapted CBT, culturally modified Cognitive Processing Therapy (CPT), EMDR and

strengths-based stress management. Other studies included a culturally-modified, Buddhism-rooted CPT and mindfulness group, while two studies adopted transdiagnostic group therapies. One additional therapeutic group involved a mixed intervention that included arts/creative therapies, psychoeducation and psychotherapy. Of the 11 health promotion interventions, nine included mental health literacy, one a cross-cultural trauma-informed intervention, and one provided general health information. Of the seven community-based interventions, two promoted financial empowerment, two included exercise, while three involved gardening groups. For a comprehensive summary of interventions as they relate to studies, see Appendix 1.

Interventions were delivered by mental health clinicians (*n* = 11), other health professionals (*n* = 3), trained peer facilitators (*n* = 7), and both mental health clinicians and peer facilitators (*n* = 2). Two studies did not report data around the professional background of facilitators.

Quality of evidence base in the reported papers

All studies had clearly articulated aims, satisfying the first criterion of the MMAT. In relation to the qualitative studies, in all cases the findings were clearly derived from the data, the results were clearly based on the data, and there was a coherence between the data, the analysis and the conclusions.

In relation to the quantitative non-randomised studies, all had collected data reported in the papers which allowed for the stated research questions to be answered. In addition, all studies utilised appropriate measurements, accounted for confounds in the design and analysis and interventions were administered as intended. All but one study had complete outcome data; in the study by Mitschke et al. (2013) an item in one measure was deemed culturally inappropriate (contained an item relating to sexual libido) and as such was omitted during data collection. There was one quantitative randomised control trial (Kananian, Soltani, Hinton, & Stangier, 2020), in which randomisation was appropriately performed,

groups were comparable at baseline, there was complete outcome data, participants adhered to the assigned intervention and outcome assessors were blinded to the intervention.

For the mixed methods studies, two studies met all criteria (Baird et al., 2017; Gerber et al., 2017). Five studies did not have an adequate rationale for using a mixed methods design (Brochmann et al., 2019; Haefner, Abedi, Morgan, & McFarland, 2019; Hartwig & Mason, 2016; Husby, Carlsson, Mathilde Scotte Jensen, Glahder Lindberg, & Sonne, 2020; Salt, Costantino, Dotson, & Paper, 2017). Three studies did not effectively synthesise the different components of the study (Hartwig & Mason, 2016; Im & Swan, 2020; Subedi et al., 2015). Divergencies in quantitative and qualitative findings were not adequately addressed in two of the studies (Eriksson-Sjöö, Cederberg, Östman, & Ekblad, 2012; Haefner et al., 2019) and could not be determined in three other studies. For one mixed methods study, no method for the qualitative component of data collection was described (Haefner et al., 2019).

Measures and instruments

An extremely broad range of psychological outcome measures were used, with no more than two studies using the same measure. Appendix 1 provides an overview of the measures used in each study.

Thematic findings

The thematic synthesis of the findings in the papers identified several relevant study characteristics: a) the effectiveness of group-based interventions, b) the challenges and benefits of group interventions, d) things that help facilitate groups.

Effectiveness of interventions.

Effectiveness of interventions varied by intervention type. A summary of findings related to effectiveness is provided below, organised by type of intervention.

Effectiveness of therapeutic groups.

CBT based interventions: In their study of a group CBT intervention with North Korean refugees resettled in South Korea, Jeon, S. (2020)'s results indicated all participants showed a significant difference in both anxiety and depression scores before and after treatment. In Kananian, et. al. (2017)'s analysis of the effects of group-based Culturally Adapted-CBT with Farsi-speaking refugees resettled in Germany, large improvement effects were seen for general psychopathology and quality of life. However, moderate but not significant improvement effects were seen in depression and trauma. Finally, Haefner et. al. (2019), in their CBT+ (incorporated elements of mindfulness, psychoeducation, stress management and interpersonal effectiveness skills) intervention with refugees resettled in the United States, found a reduction in PTSD symptoms. Overall, all three studies exploring group CBT or a modification thereof found at least some significant reductions in elements of psychopathology. However, there were variations in which mental illnesses showed improvements.

Cognitive processing/EMDR based interventions: In their study of culturally-modified cognitive processing therapy (CM-CPT) with Karen refugees resettled in Australia, Bernardi et. al. (2019) found mixed reliable change results for PTSD, anxiety and depression. In contrast, in an evaluation by Han. et. al. (2012) of CM-CPT delivered to Cambodian refugees resettled in the United States, all nine participants reported significantly lowered PTSD scores. Lehnung et. al.'s (2017) intervention with Syrian and Iraqi refugees resettled in Germany indicated that two sessions of group Eye Movement Desensitisation and Reprocessing (EMDR G-TEP) following general psychoeducation reduced trauma among the refugees in their sample. There was no statistically significant improvement in depression. Overall then group based CM-CPT and EMDR showed mixed findings, with potential effectiveness for trauma especially.

Other: Following their delivery of a transdiagnostic intervention which incorporated psychoeducation, Acceptance and Commitment Therapy and problem-solving therapeutic

principles amongst others, Van Heemstra et. al. 2019 found a significant increase in self-efficacy, and a significant decrease in general psychopathology with small-medium effects in their sample of refugees resettled in the Netherlands. Robertson et. al. (2019), in their delivery of a psychoeducational, health realisation intervention with Somalian refugees resettled in the United States, reported no statistically significant differences among groups for anxiety and depression. Effectiveness of health promotion.

Mental health literacy/mental health first aid training: Five studies focussed on mental health first aid training (MHFA); specifically correct identification of various mental illness and/or specific treatments for that illness following the intervention. Studies found improvement in recognition of depression (Slewa-Younen et al., 2020; Mitschke, et. al, 2013; Subedi et. al. 2015) and the role of anti-depressants (Slewa-Younan et al., 2020), anxiety (Mitschke, et. al , 2013), trauma (Mitschke, et. al , 2013), schizophrenia (Gurung et al., 2020) as well as general mental health literacy and de-stigmatization of mental illness (Gurung et al., 2020; Slewa-Younan et al., 2020). In their delivery of MHFA training, Subedi et. al. (2015) found participants were also more likely to report feeling confident in providing help.

Psychoeducation: Three studies found that psychoeducation groups showed efficacy in reducing psychological distress, while one reported no significant effects. Research by Small et. al. (2016) comparing office-based counselling, home-based counselling and a community-based psychoeducational group, found all three groups showed significant improvements in anxiety, somatization, and PTSD, but that the psychoeducational group was particularly effective “due to its accessibility, feasibility, and cost effectiveness” (p. 355). Baird et. al. (2017) and Husby et. al. (2020) both explore psychoeducation groups and found significant wellbeing improvements. However, research into a community sewing group with African women led by Salt et. al. (2017), which incorporated a psychoeducation component found no statistically significant difference in the total scores for the general distress.

General health information: Eriksson-Sjöö (2012)'s evaluation of a general health information group training course conducted with Arabic-speaking refugees resettled in Sweden led to lower levels of depression.

Service provider experiences: Im and Swan (2020) delivered cross-cultural trauma-informed care workshops including refugees and service providers. They reported significant improvements in providers' knowledge of culturally-responsive trauma-informed care.

Effectiveness of community-based interventions.

Seven studies explored community-based interventions which included two financial empowerment groups, two exercise groups, and three gardening-based group interventions. *Financial empowerment*: Two studies- one quantitative (Mitschke et al., 2013) and one qualitative (Praetorius et al., 2016) - included financial education programs. Mitschke et. al. (2013) found significant reductions in post-traumatic stress, depression, anxiety, and somatization. Praetorius, et. al. (2016) found that participants reported improvements in their perceptions of their mental health. *Exercise-based interventions*: Two studies delivered group exercise-based interventions. In Hashimoto-Govindasamy & Rose's (2011) qualitative analysis of an exercise-based intervention with Sudanese refugee women resettled in Australia, participants spoke repeatedly of "forgetting their miseries" and the past. Similarly, in Nilsson et. al.'s (2019) qualitative analysis of a structured physical activity and exercise intervention with Arabic-speaking refugee women resettled in Sweden, several themes were identified regarding improvements in wellbeing.

Gardening interventions: Three studies involved group gardening-based interventions. A mixed methods study by Hartwig and Mason (2016) that included South-East Asian refugee participants resettled in the United States reported "the value of the gardens to ameliorate depression emerged as a strong benefit". A gardening intervention by

Gerber et. al. (2017) with Bhutanese refugees resettled in the United States demonstrated gardeners reported greater social support than nongardeners. However, there was no statistically significant difference in distress. Finally, in Poulsen, et. al.'s (2020) horticultural vocational program with refugees resettled in Denmark, themes were identified in relation to the effectiveness of the intervention in reducing social isolation and improving mental wellbeing of participants.

Challenges and benefits of group interventions

The following subthemes were identified in relation to the challenges and benefits of group interventions.

The group format brings benefit to participants

The benefit of the group format in delivering therapeutic interventions was highlighted by 10 studies. For example, group learning benefits were highlighted in Kananian et. al.'s (2017) delivery of Culturally Adapted-CBT, where one participant said: "I saw how some other in the group begin to feel better and I tried to practice the things we talked about at home and it worked out." Preferences for group formats to improve learning around mental health were also seen in studies by Mitschke et al. (2016), and Im et al., (2020).

Seven papers also reported that a key benefit of groups was that they reduced isolation for participants or promoted other community connections, particularly with people from the same community who had lived in the resettlement country for longer periods of time (Brochmann et al., 2019; Haefner et al., 2019; Hartwig & Mason, 2016; Husby et al., 2020; Nilsson, Saboonchi, Gustavsson, Malm, & Gottvall, 2019; Poulsen, Pálsdóttir, Christensen, Wilson, & Uldall, 2020; Praetorius, Mitschke, Avila, Kelly, & Henderson, 2016).

Additional needs both inside and outside of groups

Eight papers identified additional needs of refugees both inside and outside groups, to enhance accessibility and engagement. This included managing multiple group demands

(Praetorius et al., 2016) and including more time for interventions (Eriksson-Sjöö et. al.'s (2012).

The external pressures facing refugees such as employment, housing and language learning were also identified as impacting the effectiveness of group-based interventions (e.g., Subedi, et al., 2015; Gerber et al., 2017). For example, participants in Hartwig, et. al.'s (2016) gardening group identified transport as a barrier for group participation. Other studies of group interventions found that participants wanted the groups to go further than mental health in terms of general support: particularly in relation to advocacy around individual situations or the situations of refugees more generally (e.g., Husby et al., 2020).

Accommodating refugees' needs involved additional supports in some studies. For example, in running their psychoeducational group intervention with Somalian refugees resettled in the United States, Robertson et. al. (2019)'s study team members worked intensely with participants to overcome barriers to attendance. Similarly, Brochmann et. al.'s (2018) qualitative study of service provider's experiences of group-based interventions found that while group therapy may enable clinics to reduce waitlists, a considerable amount of time and resources must be allocated to make group therapy for refugees effective.

Managing the ending of group interventions

Three studies referred to the need for sensitivity in ending group treatment, and that participants reported not wanting groups to end (e.g., Praetorius et al., 2016; Eriksson-Sjöö, 2012; Nilsson et. al.'s, 2019); suggesting that this is an important consideration in designing group-based interventions

Things that help facilitate groups

Five studies outlined factors that may facilitate running group interventions. These were broken into three key themes: gendered groups (*n* = 3), peer-delivered content (*n* = 6), community consultation (*n* = 7), participant safety (*n* = 2), cultural adaptations of content (*n* =

7), enhancing accessibility (*n* = 10), and delivering content in language of participants (all studies).

Gendered groups

Of the included studies, 18 interventions incorporated a mixed gender sample, while eight studies included women only participants and two included only men. Three studies considered the benefits of segregating participants by gender explicitly. For example, in Hashimoto-Govindasamy et. al.'s evaluation of an exercise group, participants valued that the program was specifically for women, as this enabled women to speak openly, and also to care for their children (including breastfeeding). Kananian et. al. (2020) and Nilsson et. al. (2019) echoed these findings.

Peer-delivered interventions and consulting communities

Six interventions used peer facilitators to deliver group interventions, some of whom were former refugees themselves (Gurung et. al. 2020; Mitschke et. al. 2017; Nilsson et. al. 2019; Small et. al. 2016). In the study by Nilsson et. al. (2019), refugees themselves suggested future interventions should incorporate peer facilitators.

Seven studies consulted with refugee communities when developing content to enhance relevance and ensure cultural appropriateness. Some studies achieved this by establishing focus groups with refugees themselves (Van Heemstra et. al. 2019; Subedi et. al. 2015; Baird et. al. 2017), while others enlisted the support of working groups made up of refugee mental health experts and community leaders (Mitschke, et. al. 2013; Slewa-Younan et. al. 2020; Jeon et. al. 2020). Another study engaged a Bhuddist monk to develop and deliver the treatment content (Han. et. al. 2012). Consulting refugees and community stakeholders was supported by refugees themselves, with participants in Mitschke et. al.'s (2013) community-based psychoeducation group stressing "the need for a participatory

model of program development…expressing a strong desire to be involved in the creation and delivery of program content."

Establishing participant safety

Establishing participant safety was discussed by two studies. Specifically, in interviewing service providers of group interventions with refugees, Brochmann et. al. (2018), some participants reported formalising group norms, utilising the same key therapists, and ensuring individual clients could be attended to where necessary within the group program. Facilitators also specified the importance of explaining the concept of confidentiality: a core fear of participants. Similarly, group-determined codes of conduct were deemed highly important in Husby et. al.'s (2020) community-based psychoeducational intervention.

Cultural adaptations of content

Seven of the included studies made modifications to group content to reflect culturally-relevant adaptations. While some of the interventions engaged in intercultural sharing (Hashimoto-Govindasamy et. al., 2011; Van Heemstra et. al. 2019;), others incorporated culturally-specific modifications, such as culturally sensitive practices including seeking spiritual advice, guidance and prayer (Slewa-Younan, 2020). Other studies included culturally-adapted case vignettes (Gurung et. al. 2020; Bernardi 2019; Subedi et. al. 2015). Some studies adopted cultural concepts of distress and culturally-appropriate imagery. For example, in delivering CA-CBT to Afghan refugees, Kananian et. al. (2020) included idioms of distress such as "thinking a lot" and a 'Persian garden' guided imagery component.

Enhancing accessibility

Food, transport, childcare, reimbursement: Ten studies reported implementing resources to enhance accessibility for participants. Namely, the provision of food, transport, childcare and reimbursement were key components of enhancing accessibility. For example, Hashimoto-Govindasamy et. al. 2011; Baird et. al. 2017 & Salt et. al. 2017 all incorporated food in their group interventions. Other studies provided transport assistance (Hashimoto- Govindasamy et. al. 2011 & Baird et. al. 2017) or highlighted the importance of this following their group intervention (Haefner et. al., 2019). Of the eight studies with female participants only, three provided child care, which participants viewed positively (Hashimoto-Govindasamy et. al. 2011; Baird et. al. 2017 & Haefner et. al. 2019). Eight further studies reimbursed participants (Mitschke et. al. 2013; Praetorius, et. al. 2016; Slewa-Younan et. al. 2020; Mitschke et. al. 2017; Small et. al. 2016; Baird et. al. 2017; Gerber et. al. 2017 & Salt et. al. 2017). An intervention by Praetorius, et. al. (2016) in which participants knitted scarves for sale at a market provided payment to women for their work.

Community-based location: Three studies delivered interventions in communities where refugees lived at local community centres, citing enhanced accessibility as the primary reason for doing so (Mitschke et. al. 2016; Mitschke, et. al. 2013 & Praetorius, et. al. 2016).

In language: All of the studies considered language issues either through using interpreters (*n*=18), or by using bilingual/ bicultural staff members, including mental health clinicians themselves (*n*=6). The remaining two studies did not require interpretation, as the resettlement country and language spoken in participants' country of origin were the same (Jeon et. al. 2020; Brochmann et. al. 2018).

Discussion

The majority of studies included in this review reported positive findings with respect to the effectiveness of group and community-based interventions on refugee's wellbeing. Overall, therapeutic groups such as those involving CA-CBT or CPT were more effective in reducing refugee's distress and enhancing wellbeing, while health promotion interventions were effective in improving refugees' and participants' mental health literacy. This supports previous research: the promising effect of CA-CBT has also been reported in studies with non-refugee samples (e.g., Naeem et al. (2015), as has group based CPT (e.g., see review by Lenz, Bruijn, Serman & Bailey, 2014), group EMDR (Jarero et al., 2015) and transdiagnostic interventions with groups (Brassington et al. (2016). In relation to group based health promotion interventions, Dolan, Simmonds-Buckley, Kellett, Siddell, and Delgadillo (2021), also found moderate pre-post treatment reductions in anxiety and depression, and large reductions in distress in their systematic review and meta-analysis of stress control large group psychoeducation in the general population. Some studies in this review reported mixed findings (Bernardi, Dahiya, & Jobson, 2019; Lehnung, Shapiro, Schreiber, & Hofmann, 2017), although this was largely attributed to sample size issues. Nevertheless, more research is required to confirm the efficacy of group interventions in relation to specific mental illness in refugees.

In terms of broader benefits, this review found that community-based interventions were typically effective in improving refugee's social support and connectedness: group based exercise, financial empowerment and gardening groups all have shown promise in previous research with general populations (Jiménez-Solomon et al., 2016; Luth-Hanssen, Fougner, & Debesay, 2020; Smidl, Mitchell, & Creighton, 2017).

In order to enhance accessibility and engagement, several studies identified additional needs of refugees both inside and outside groups. For example, being aware of and providing support around stressors facing refugees, such as transport, housing, employment and language learning were deemed important (Brochmann et al., 2019;

Eriksson-Sjöö et al., 2012; Hartwig & Mason, 2016; Hashimoto-Govindasamy & Rose, 2011; Mitschke et al., 2017; Praetorius et al., 2016; Robertson et al., 2019; Salt et al., 2017; Subedi et al., 2015). A key consideration when facilitating group interventions was the need for additional support in managing the ending of group treatment, as transitioning out was particularly difficult for refugees (Eriksson-Sjöö et al., 2012; Mitschke et al., 2017; Nilsson et al., 2019; Praetorius et al., 2016). The additional needs of refugees aside from mental health treatment has been documented in previous research (e.g., Hynie (2018)). Likewise, the difficulty clients experience in care ending is not limited to group therapy: it has also been well documented as a challenge in need of consideration in individual therapy, as discussed in research by Murdin et al. (2015).

Several studies identified key elements that helped facilitate group interventions. These included facilitating gender-specific groups, incorporating peer-delivered content, consulting refugee communities, establishing participant safety, adapting content to be more culturally appropriate and enhancing accessibility of groups by conducting them in participants' primary language and considering transport and childcare needs. Similarly, previous research by Kiselev et al. (2020) in their study of Syrian refugees and asylum seekers in Switzerland also reports the need for enhancing accessibility by addressing structural and socio-cultural barriers to care. While gender composition and participant safety has been documented previously in group interventions with non-refugees (Brabender, Fallon, & Smolar, 2004), this research generated refugee-specific findings. For example, conducting groups in participants' primary language, consulting communities and considering sociocultural determinants of health were novel findings unique to this group.

Given the many ways group and community-based interventions support improvements in refugee's wellbeing, it is suggested that services consider utilising groups within a stepped care model to enhance accessibility and to meet refugees' needs. In imagining what integrating group and community interventions may look like within service design, Cornish (2020) suggest nine steps, ranging from watchful waiting and mental health

literacy as the least intensive step, through to workshops and intensive group programs as mid-intensity care options, while individual therapy and acute care feature as higher intensity tiers of care. Thus, group and community-based interventions with refugees may easily be integrated into a stepped care service model, as suggested in Figure 2 below (adapted from Cornish (2020), with modifications stemming from this review featured in yellow).

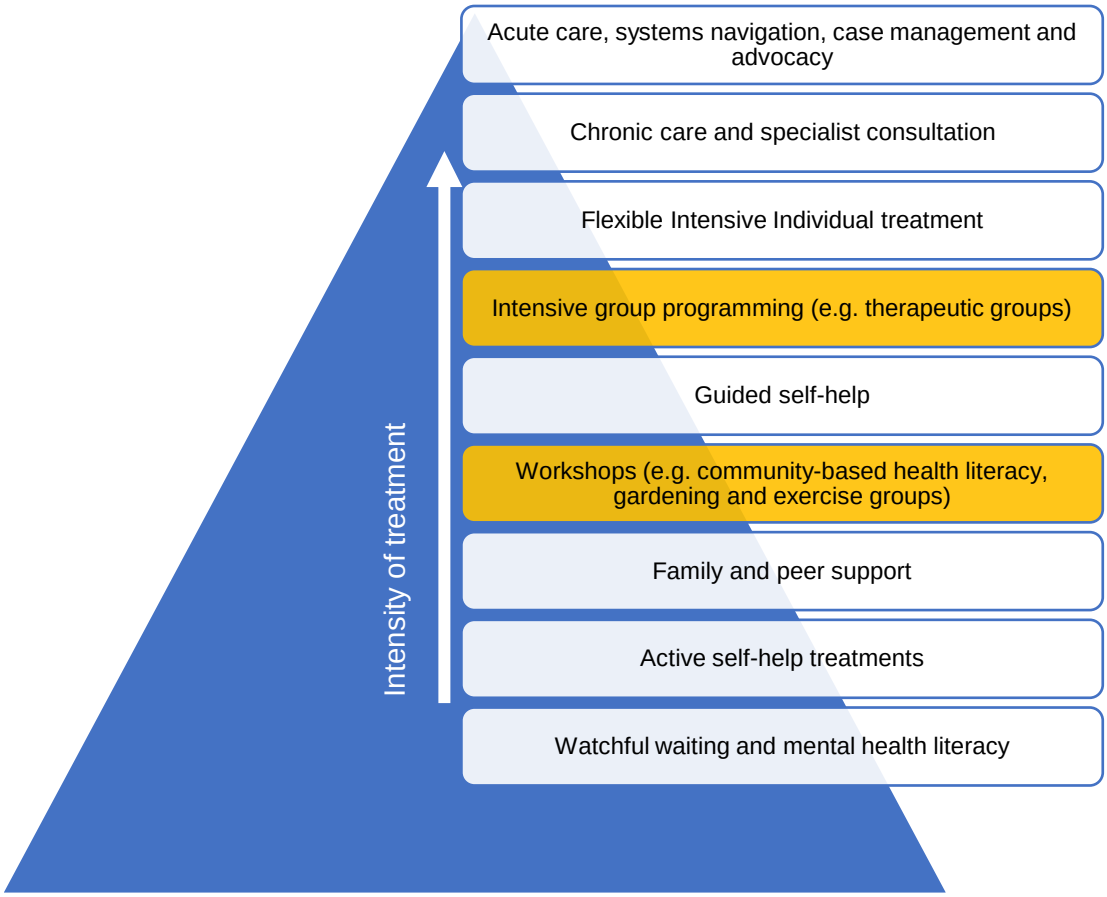
This review has some limitations. In particular, the search strategy included studies published in English only, potentially presenting bias. Further, the majority of included studies occurred in high-income resettlement countries only, which reduces the applicability of findings to other settings. Finally, the current study's decision to exclude asylum seekers from the sample may have introduced bias, as many studies used mixed samples of refugees and asylum seekers and were excluded where data could not be separated. Future research may capture the experiences across different immigration statuses by including asylum seekers.

Although the current study aimed to incorporate the experiences of service providers in providing group and community-based interventions to refugees, only one study with service providers met criteria for inclusion. Future research is needed to explore service provers' perspectives further.

Finally, our focus on group and community-based interventions means that it is outside the scope of this review to comment on the effectiveness of individually-administered interventions in refugees and future research could seek to focus on this with regards to stepped care models. Additionally, future research as to the effectiveness of stepped care interventions with refugees more generally is in urgent need of consideration.

Figure 2

Stepped Care Service Model integrating group-based and community-based interventions



Conclusion

The effectiveness of group and community-based interventions with refugees is consistent with the effectiveness of these interventions in other clinical populations. Key benefits for refugees include improvement in mental wellbeing, enhanced social support and empowerment. For service providers, group programs may help to alleviate waitlist burden and increase client flow. While group and community-based interventions are highly effective, refugees have additional needs such as housing, employment, language learning and transportation that require addressing and can impact on their participation in groups. Ultimately, several successful group and community-based interventions made culturally meaningful modifications to content, which enhanced the applicability and acceptability of

interventions. Future group and community-based interventions should be delivered in participants' primary language and, where possible, be separated by gender to enhance accessibility. Given the effectiveness of group and community-based interventions with refugee populations, inclusion of these modalities as part of stepped care approaches to service delivery are likely to be beneficial.

Compliance to ethical standards

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Conflict of interest

The authors declare they have no conflict of interest

Ethical approval

Not applicable

Author contribution statement

TG and CD contributed to the design and implementation of the research. TG performed the systematic searches of articles and reference checks of included articles. TG undertook preliminary title and abstract screening. Full text screening was performed collaboratively between TG and CD. Both authors contributed to extraction of themes from the data. TG took the lead in writing the manuscript. CD provided critical feedback and helped shape the research, analysis and manuscript.

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Appendix 1

Summary of included articles

Author/date	Aim/ study focus	Study design	Sampling	Intervention type	Outcome focus/ measures	Main findings
Baird et. al. (2017)	To evaluate the acceptability and feasibility of a 10-week community-based, culturally tailored mental health intervention	Mixed methods: community-based participatory research	Refugees (N=12) (100% female, country of origin= South Sudan)	Health promotion (psychoeducation)	Hopkins Symptom Checklist (HSCL-25), field notes, focus groups	A majority of the post-intervention HSCL scores were higher than the pre-intervention scores for both the anxiety and depression subscales at both individual and group levels. Qualitative results attributed this increase to women's improved mental health awareness.
Bernardi et. al. (2019)	To investigate the feasibility and acceptability of a modified cognitive processing therapy (CPT) group program for Karen refugees with posttraumatic stress disorder (PTSD)	Mixed methods: explorative design	Refugees (N=7) (100% female, country of origin= Myanmar)	Therapeutic group (CPT)	Clinician-Administered PTSD scale (CAPS-5), Life Events Checklist-5 (LEC-5), Posttraumatic Stress Disorder Checklist (PCL-5), Hopkins Symptom Checklist (HSCL)	At posttreatment all participants no longer met PTSD diagnostic criteria and had a reliable improvement in PTSD symptoms when compared with pretreatment scores. However, at follow-up four participants had a reliable worsening in PTSD symptoms
Brochmann et. al. (2018)	The study aimed to explore service providers' experiences of facilitating group therapy with refugees	Mixed methods: explorative design	Service providers (N=32) (74% female, country of origin= Denmark)	Therapeutic group (mixed)	Experiences of facilitating group therapy with refugees	Most practitioners reported favourable experiences of group treatment. Practitioners experienced treatment guided by patient-centred objectives, such as interpersonal learning, as more meaningful and effective than treatment primarily aimed at accommodating administrative aims such as cost-effectiveness.

Eriksson-Sjöö et. al. (2012)	To evaluate self-perceived health-related quality of life among refugees participating in a group health promotion activity	Mixed methods: prospective design	Refugees (N=39) (54% male, country of origin= Arabic-speaking)	Health promotion (general health information)	European Quality of Life Five Dimension (EQ-5D), participant observations, oral evaluations	Significantly fewer participants experienced pain problems (p=0.004) as well as depression problems (p=0.041) at the second follow-up compared to baseline. Qualitatively, participants still experienced intrusive thoughts and memory problems.
Gerber et. al. (2017)	To evaluate the effectiveness of a community gardening intervention for refugees	Mixed methods: exploratory design	Refugees (N=50) (62% female, country of origin= Bhutan)	Community-based intervention (gardening)	Refugee Health Screener (RHS-15), Patient Health Questionnaire-15 (PHQ-15), Medical Outcomes Study Social Support Scale (MOS-SSS), Adapted Client Assessment Tool (ACAT), semi-structured interviews	Distress in gardeners versus nongardeners was not significantly different as indicated by the Refugee Health Screener. Gardeners reported greater social support than nongardeners, (p = .017), with a moderate to large effect size (d = .70. Qualitatively, gardeners reported increased autonomy and self-efficacy.
Gurung et. al. (2020)	To examine the effectiveness of Mental Health First Aid (MHFA) training offered with and without culturally-appropriate orientation to mental health terminology and concepts	Quantitative: non-randomised pre-post design	Refugees (N=458) (55% male, country of origin= Bhutan)	Health promotion (mental health literacy)	Mental health symptom recognition, MHFA response, confidence helping mentally ill person, stigma, mental health literacy	Pre- to post-training improvement in ability to recognize schizophrenia, depression, and the overall mental health literacy was greater for Bhutanese refugees who attended orientation relative to other participants ($P < 0.05$)
Haefner et. al. (2019)	To evaluate the effectiveness of using a veterans posttraumatic stress disorder (PTSD)	Quantitative: pre-post design	Refugees (N=18) (83% male, country of	Therapeutic group (CBT+)	PTSD Checklist for DSM-5 (PCL-5)	Results showed that participants reported a decrease in total value scores postintervention compared to preintervention (p <0.001).

	group therapy program with refugees		origin=not described)			
Han et. al. (2012)	To evaluate a pilot psychosocial treatment program developed by combining Cambodian cultural traditions and with Western mental health techniques	Quantitative: one-group pre-post-test design	Refugees (N=9) (77% female, country of origin= Cambodia)	Therapeutic group (CA-CBT+)	Harvard Trauma Questionnaire (HTQ), family-related acculturation stress questionnaire	All nine participants reported significantly lowered mean of the HTQ-PTSD scores from the pre-test to the post-test ($p < .001$, effect size = 1.73). Family-related acculturation stress level also indicated significantly reductions after the intervention ($p < .01$, effect size = 1.09).
Hartwig & Mason (2016)	To evaluate a gardening project with Karen and Bhutanese refugees	Mixed methods: surveys and focus groups	Refugees and service providers (N=97) (65% female, country of origin= South East Asian)	Community-based intervention (gardening)	Depression and food security, as measured by the Patient Health Questionnaire (PHQ-2), and Supplemental Nutrition Assistance Program (SNAP)	Refugee gardeners expressed receiving physical and emotional benefits from gardening, including the physical exercise, mental health benefits, and the appreciation of being outside.
Hashimoto-Govindasamy & Rose (2011)	To evaluate a Sudanese women's group exercise program designed from a community development strengths-based model.	Qualitative: ethnographic process evaluation	Refugees (N=12) (100% female, country of origin= Sudan)	Community-based intervention (exercise)	Experiences of exercise group	Participants viewed the program positively due to educational components and the opportunity for respite. Transport and childminding support were seen as vital.
Husby et. al. (2020)	To study the acceptability and impacts of a community group intervention for refugees	Mixed methods: convergent parallel design	Refugees (N=32) (65% female, country of origin= Syria, Palestine)	Health promotion (psychoeducation)	World Health Organisation Five Wellbeing Index (WHO-5), focus group interviews	Results showed a significant pre-post difference ($p = .003$). Cohen's d was 0.65 equalling a moderate effect size. Stress, parenting, trauma and identity emerged as qualitative themes in the data.
Im & Swan (2020)	To evaluate a cross-cultural trauma-informed care training program in building competencies and providing tools and resources to	Mixed methods: semi-structured retrospective pre- and post-training evaluation	Refugees and service providers (N=124)	Health promotion (trauma-informed care)	Pre-and post intervention questionnaires	Significant improvements were observed in providers' knowledge of trauma impacts, cultural

	refugee-serving professionals and refugee community leaders.		(77.4% female, country of origin= Afghanistan, Bhutan, Congo & Karen)			expressions of trauma/stress-related symptoms, and culturally responsive trauma-informed care.
Jeon et. al. (2020)	To compare the effectiveness of Cognitive Behaviour Therapy (CBT) to simple relaxation in reducing depression and anxiety among North Korean refugees	Quantitative: pre-post design	Refugees (N=38) (92% female, country of origin= North Korea)	Therapeutic group (CBT)	Center for Epidemiologic Studies Depression Scale (CES-D), State-Trait Anxiety Inventory Scale (STAI-S), Impact of Event Scale-Revised (IES-R)	Participants had a significant decrease in CES-D scores after treatment (p=0.037). The decrease in CES-D was larger in those who participated in the CBT compared to those in simple relaxation (p=0.023). Participants with high levels of anxiety showed significant decreases in STAI-S scores after treatment, regardless of which type of program they participated in (p=0.023).
Kananian et. al. (2017)	To evaluate the effectiveness of culturally adapted Cognitive Behaviour Therapy (CA-CBT) in an uncontrolled pilot study with a sample of Farsi-speaking refugees	Quantitative: uncontrolled pilot study	Refugees (N=9, country of origin= Afghanistan, Iran)	Therapeutic group (CA-CBT)	General Health Questionnaire (GHQ-28), Posttraumatic Checklist for DSM-5 (PCL-5), Patient Health Questionnaire (PHQ-9), Somatic Symptom Scale (SSS-8), World Health Organisation Quality of Life Brief Questionnaire (WHO-QOL BREF), Affective Style	Improvements were found on almost all questionnaires. Large effect sizes were seen for the GHQ-28 (d = 2.0), WHOQOL-BREF scales (d = 1.0–2.3), ASQ tolerating subscale (d = 2.2), and ERS (d = 1.7)

					Questionnaire (ASQ), Emotion Regulation Scale (ERS)	
Kananian et. al. (2020)	To evaluate the effectiveness of culturally adapted Cognitive Behaviour Therapy plus problem-solving training (CA-CBT+) in a randomized controlled pilot trial with a sample of Farsi-speaking refugees	Quantitative: randomised controlled pilot trial	Refugees (N=24, country of origin= Afghanistan, Iran)	Therapeutic group (CA-CBT+)	M.I.N.I diagnostic interview, General Health Questionnaire-28 (GHQ-28), PTSD Checklist for DSM (PCL-5), Patient Health Questionnaire (PHQ-9), Somatic Symptom Scale (SSS-8), World Health Organisation Quality of Life Brief Questionnaire (WHOQOL-BREF), Emotion Regulation Scale (ERS)	Large between-group effect sizes were seen at posttreatment in the GHQ-28, *d* = 3.0, and for most secondary outcome measures.
Lehnung et. al. (2017)	To investigate the effectiveness of two sessions of Eye Movement Desensitisation and Reprocessing Therapy Group Traumatic Episode Protocol (EMDR G-TEP) in treating traumatized refugees.	Quantitative: waitlist control group design	Refugees (N=18) (77% male, country of origin = Syria & Iraq)	Therapeutic group (EMDR)	IES-R (Impact of Event Scale-Revised, Beck Depression Inventory (BDI-II)	There was a significant difference in groups in the IES-R scale measures (p = .01), between T1 and T2 between the two groups. Differences in the BDI between groups at T1 and T2 did not quite reach significance (p = .06).
Mitschke et. al. (2013)	To examine the effect of a group-based financial education	Quantitative: quasi-experimental, non-equivalent group design	Refugees (N=65)	Community-based intervention (financial empowerment)	Post-Traumatic Stress Disorder Checklist-Civilian (PCL-C), Patient Helath	Results from pre/post and follow-up assessments indicate that participants in both intervention groups experienced significantly less depression, anxiety,

	program for Bhutanese refugee women who had been recently resettled in the United States		(100% female, country of origin = Bhutan)		Questionnaire-Somatic, Anxiety and Depressive Symptoms Scale (PHQ-SADS), Medical Outcomes Study Social Support Scale (MOS-SSS)	somatization, and PTSD symptoms at posttest, which were maintained at 3-month follow-up.
Mitschke et. al. (2017)	To evaluate refugees' experiences of treatment for depression, post-traumatic stress symptoms, or anxiety.	Qualitative: semi-structured interviews	Refugees (N=30) (59% female, country of origin= Bhutan, Burma, Burundi, Congo & Rwanda)	Therapeutic group (mixed)	Experiences of treatment for mental health	Themes generated from the interviews emphasized the need for strong group-based social support as well as a focus on practical needs such as acquiring and maintaining employment, language, and literacy training, and access to care.
Nilsson et. al. (2019)	To explore the experience of participation in physical activity and exercise as part of treatment for trauma-affected refugees	Qualitative: explorative design	Refugees (N=33) (70% male, country of origin= Iraq, Syria, Lebanon, Jordan & Palestine)	Community-based intervention (exercise)	Experiences of participating in group physical activity & exercise treatment	Overall, participants experienced physical activity and exercise as a process of building resilience. Participants experienced improvements in both physical and mental health domains. The treatment group settings were experienced as becoming a vehicle for overcoming social fear and isolation.
Poulsen et. al. (2020)	To evaluate the impact of a horticultural vocational program for refugees	Qualitative: Interpretive phenomenological analysis (IPA)	Refugees (N=28) (60% males, countries of origin= multiple)	Community-based intervention (gardening)	Experiences of GROW project	The natural environment evoked a feeling of safety as well as positive memories in the participants. Horticultural activities and the positive and respectful attitude from staff initiated a recovery process.

						New skills were achieved at an individual pace, and feelings of isolation decreased.
Praetorius et. al. (2016)	To assess the impact of a group-based financial education course and social enterprise on the self-reported mental health of Bhutanese refugee women resettled in the United States	Qualitative: grounded theory	Refugees (N=12) (100% female, country of origin = Bhutan)	Community-based intervention (financial empowerment)	Experiences of social enterprise/ financial literacy gorup	Both intervention groups (financial literacy and social enterprise) had clear and significant mental health improvements
Robertson et. al. (2018)	To examine the effects of a culturally adapted Somali health realisation intervention on coping and mental health outcomes in Somali refugee women post-resettlement	Quantitative: three-arm comparison group trial	Refugees (N=65) (100% female, country of origin= Somalia)	Health promotion (psychoeducation))	Ways of Coping Questionnaire (WAYS), Symptom Checklist 90 (SCL-90), Osman-Mohammed-Gobena Coping questionnaire (OMGC)	The intervention significantly affected multiple dimensions of coping: WAYS-distancing ($p = 0.038$), seeking social support ($p = 0.042$), positive reappraisal ($p = 0.001$). The HR intervention also demonstrated improvement in depression symptom ratings ($p = 0.079$)
Salt et. al. (2017)	To pilot the Refugee Health Screener-15 (RHS-15) to assess mental health and the Pathways to Wellness group intervention to identify internal and structural barriers affecting resettlement with a refugee women's sewing group.	Mixed methods: social ecological and community-based participatory research	Refugees (N=12) (100% female, country of origin= Somalia, Iran, Nepal, Burma, Chad & Karen)	Health promotion (psychoeducation)	Refugee Health Screener (RHS-15)	There was no statistically significant difference in the total scores for the baseline RHS-15 survey and the post-intervention RHS-15 survey. The women conveyed several current stressors, such as language barriers, financial stress and transportation as barriers to maintaining good health.
Slewa-Younan (2020a)	To conduct a preliminary trial of a culturally tailored mental health promotion program designed to improve mental	Quantitative: uncontrolled, repeated measures pre-post design	Refugees (N=31) (42.4% male, country of	Health promotion (mental health literacy)	Personal Stigma in Response to Mental Illness Scale, Social Distance Scale,	Improvements in most aspects of mental health literacy assessed were found immediately post-intervention and at follow-up.

	health literacy among two Arabic-speaking refugee populations.		origin= Iraq & Syria)		K-10, qualitative questionnaires	
Slewa-Younan (2020b)	To evaluate if a mental health literacy training program was effective in Arabic-speaking religious and community leaders.	Quantitative: uncontrolled, repeated measures pre-post design	Refugees and service providers (N=52) (69% female, country of origin= Iraq, Australia & Lebanon)	Health promotion (mental health literacy)	Pre-post intervention questionnaires	Significant differences were found post-training in measures such as the ability to recognise mental health problems ($p = 0.035$) and understanding of medication in treating PTSD ($p = 0.00$). An improvement in negative attitudes ($p = 0.042$) was observed.
Small et. al. (2016)	To evaluate the effectiveness of three different mental health interventions among refugees	Quantitative: quasi-experimental pre-post design	Refugees (N=81) (71% male, country of origin= Burundi, Burma, Democratic Republic of Congo, Bhutan)	Health promotion (psychoeducation)	PTSD Checklist (PCL-C),Patient Health Questionnaire (PHQ-SADS), Medical Outcomes Social Support Survey (MOS-SSS)	At posttest, decreases in PTSD, anxiety and somatization were noted across all treatment groups. Participants in home-based counselling reported higher levels of improvement in their mental health outcomes. However, social support for the community-based psychoeducation group ($p < .001$) significantly increased from baseline to posttreatment.
Subedi et. al. (2015)	To evaluate the effectiveness of Mental Health First Aid (MHFA) training in improving knowledge of mental health problems and treatment processes	Mixed methods: uncontrolled pre-test post-test design	Refugees (N=58) (83% male, country of origin= Bhutan)	Health promotion (mental health literacy)	Mental health literacy, stigmatising attitudes	Between the pre- and post-test, participants showed significant improvement in the recognition of symptoms of depression. However, there was no reduction in negative attitudes towards people with mental illness.
Van Heemstra et. al. (2019)	To evaluate the potential effectiveness of 7ROSES, a transdiagnostic intervention that aims to increase self-efficacy among treatment-	Quantitative: observational cohort design	Refugees (N=49) (65% male, multiple	Therapeutic group (transdiagnostic)	Self-efficacy & general psychopathology (as measured by the GSES (General Self	Results indicated a significant increase in GSES scores ($p = .03$) and significant decrease in BSI scores ($p = .04$) with medium-small effects (both

	seeking refugees in dealing with postmigration stressors.	countries of origin)	Efficacy Scale) & BSI (Brief Symptom Inventory)	r = −.28).

Appendix 2

Intent to submit

Both authors intend to submit the manuscript for publication in The Australian Psychologist. Both authors acknowledge that the journal has strict word count requirements and intend to further refine the manuscript, adhering to the 5,000 word count limit prior to submission. A copy of The Australian Psychologist's Instructions to Authors is included below.

The Australian Psychologist Author Guidelines

Author Guidelines

1. SUBMISSION

PLEASE NOTE SUBMISSIONS TO AUSTRALIAN PSYCHOLOGIST ARE NO LONGER ACCEPTED THROUGH WILEY. Please refer to the Editorial Office contact below.

The submission system will prompt you to use an ORCiD (a unique author identifier) to help distinguish your work from that of other researchers. Click **here** to find out more.

2. MANUSCRIPT TYPES AND WORD LENGTH

Australian Psychologist accepts new and continuing empirical reports (quantitative/qualitative/case study). Reports must be completed to a high standard and

relevant to psychological practice, health policy, and journal readership. *Australian Psychologist* publishes commentaries and response to commentaries of articles appearing in the journal.

Submission word limits include all materials i.e. title page, manuscript, references, tables, and figures. i.e.

Quantitative reviews (8000 words)

Narrative reviews (5000 words)

Commentaries (6000 words)

Case Studies (4000 words)

3. STYLE

Manuscripts must follow the American Psychological Association's publication style guidelines (6th ed.), except regarding spelling. *Australian Psychologist* uses Australian spelling - please follow the latest edition of The Macquarie Dictionary (3rd ed. Rev.). All articles published by the journal are in English.

4. MANUSCRIPT REQUIREMENTS

The following relates to quantitative and/or qualitative research, and Case Studies. Hypothesis in this context relates to research questions and hypotheses.

Empirical Reports

Empirical Reports submitted to *Australian Psychologist* must adhere to

(i) Journal Article Reporting Standards (JARS) guidelines for reporting psychological research reports and

(ii) Meta-Analysis Reporting Standards (MARS) guidelines for reporting meta-analyses (i.e., Appendix of APA Publication Manual, **http://www.apastyle.org/manual/related/JARS-MARS.pdf**).

Consistent with the American Psychological Association (6th ed.) publication guidelines, JARS and MARS guidelines provide a data reporting standard to ensure readers have

appropriate information to evaluate findings' importance. Authors describing other review methodologies should also comply with JARS and MARS guidelines wherever possible.

Manuscripts should be presented as:

separate title page

abstract and key words, text, key points, acknowledgments, references, appendices, endnotes, tables with title and footnotes, and figures.

Text footnotes are not allowed – please use endnotes.

Note for qualitative research, the method, results and discussion sections may differ from directions d), e), and f) below as specified in the section entitled Qualitative Research.

a) **Title page**: Submissions are subject to anonymous peer review. Author details must not appear in your manuscript, but should appear in a separate Title Page containing (i) manuscript title (ii) running head (40 characters), and (iii) manuscript date. The title should be short, informative, contain the major key words and variables under investigation. Please do not use abbreviations in the title.

b) **Abstract**: *Australian Psychologist* manuscripts must include a 200 – 250 word abstract, structured to these headings: **Objective**, **Method**, **Results**, and **Conclusions**. Six key words for indexing should be placed after the abstract, in alphabetical order.

c) **Introduction**: *Australian Psychologist* will only accept manuscripts with data/research supporting the conceptual and theoretical positions. Please:

- outline the problem's importance, and theoretical and practical implications;
- provide a comprehensive, up-to-date literature review and critique using the best forms of evidence;
- state how present research differs from previous research;
- specify research aims, hypotheses or research questions;
- describe how theory was used to derive hypotheses or research questions; and how the research design and hypotheses relate.

d) **Method**: The method section of quantitative and qualitative reports must contain a detailed account of measures/procedures to ensure reader understanding/replication. The method should describe:

- the participant characteristics and any inclusion/exclusion criteria; demographic variables and any topic-specific characteristics;
- sampling procedures used for selecting participants, including information regarding the sampling method, percentage of sample approached that participated;
- where the data were collected (e.g., within the workplace, clinic, private practice, off-site setting e.g. independent office, via post, etc.);
- any conditional requirements for participation such as payment of participants, agreement to provide study results, entry into a prize raffle; informed consent;
- ethical approval statement; intended and actual sample size and power analyses used to determine sample size;
- all study instruments used, including those that are not being reported within the present study; interview transcripts, where relevant;
- whether parts of the database have been previously published or are being published separately; psychometric or biometric information on measures, where relevant; assignment method; and statistical analyses procedures.

Australian Psychologist retains the right to reject any manuscript on the basis of unethical conduct in research.

e) **Results**: For quantitative studies, *Australian Psychologist* requires adequate reporting of statistical significance of results. Please report means, standard deviations, and confidence intervals for all continuous study variables and the effect sizes for the primary study findings. If effect sizes are not available, please include this in your submission cover letter. Please report confidence intervals for any effect sizes involving principal outcomes.

This section should include participant flow (i.e., total number of participants, flow of participants through each stage of the study); recruitment, dates of the recruitment period and any repeated measures of follow-up assessments; all information regarding statistical analyses, including problems with assumptions or distributions that could affect findings validity, any missing data (including percentages or frequencies, theories regarding the cause of missing data and whether it is missing at random, and methods used to address missing data); information regarding cases deleted from any primary or secondary analysis, subgroup or cell sample sizes, means, standard deviations, and other descriptive statistics, and effect sizes and confidence intervals; information regarding the error rate adopted for inferential statistics and the direction, magnitude, degrees of freedom, and exact p level; variance-covariance matrix or matrices associated with multivariate analytic systems; estimation problems; the statistical software program used, information surrounding other analyses (e.g., exploratory analyses); and a discussion of implication of ancillary analyses for statistical error rates.

f) **Discussion**: For quantitative reports, this section requires a support or non-support statement for all hypotheses and how these were assessed (i.e., primary or secondary analyses, or post hoc explanations); similarities or differences between results and those in previous research; an interpretation of results accounting for any sources of bias and threats to validity, the imprecision of measures, the overall number of tests and the overlap among tests, and limitations or weaknesses of the study; generalisability of findings accounting for the target population and any contextual issues; and a discussion surrounding the implications for future research, programs, or policies. Please discuss study sample diversity and the generalisability of findings.

g) **Key Points**: Please include 6 key points: 3 Key Points for “what is already known about this topic” and 3 Key Points for “what this topic adds” in your manuscript. Please place the Key Points after the key words in the manuscript, and write your Key Points with a practitioner audience in mind.

i) **Acknowledgements**: The source of financial grants and other funding must be acknowledged, including a declaration of authors' industrial links and affiliations. Colleague or institutions contributions should also be acknowledged. Personal thanks are not appropriate.

j) **References**: All referencing, footnotes, tables and figures must be prepared according to the Publication Manual of the American Psychological Association requirements (currently 6th ed.). This includes Digital Object Identifiers (DOI's) wherever available.

APA – American Psychological Association

References should be prepared according to the *Publication Manual of the American Psychological Association* (6th edition). This means in text citations should follow the author-date method whereby the author's last name and the year of publication for the source should appear in the text, for example, (Jones, 1998). The complete reference list should appear alphabetically by name at the end of the paper.

A sample of the most common entries in reference lists appears below. Please note that a DOI should be provided for all references where available. For more information about APA referencing style, please refer to the **APA FAQ**. Please note that for journal articles, issue numbers are not included unless each issue in the volume begins with page one.

Journal article

Example of reference with 2 to 7 authors

Beers, S. R. *, &* De Bellis, M. D. *(*2002*).* Neuropsychological function in children with maltreatment-related posttraumatic stress disorder*. The American Journal of Psychiatry, 159,* 483–486.https://doi:10.1176/appi.ajp.159.3.483

Ramus, F., Rosen, S., Dakin, S. C., Day, B. L., Castellote, J. M., White, S., & Frith, U. (2003). Theories of developmental dyslexia: Insights from a multiple case study of dyslexic adults. *Brain*, *126*(4), 841–865. https://doi: 10.1093/brain/awg076

Example of reference with more than 7 authors

Rutter, M., Caspi, A., Fergusson, D., Horwood, L. J., Goodman, R., Maughan, B., … Carroll, J. (2004). Sex differences in developmental reading disability: New findings from 4 epidemiological studies. *Journal of the American Medical Association*, *291*(16), 2007–2012. https://doi: 10.1001/jama.291.16.2007

k) **Endnotes** must appear as a numbered list at the end of the manuscript, not the foot of each page. Endnotes should be referred to with consecutive, superscript Arabic numerals in the text. They should be brief, containing short comments tangential to the paper's main argument, and not include references.

l) Please place **Appendices** at the end of the manuscript, numbered in Roman numerals and referred to in the text.

m) **Tables** should be self-contained and complement not duplicate, text information. Number tables consecutively in the text using Arabic numerals. Include tables on a separate page with concise but comprehensive legend information above. The table, legend and footnotes should be understandable without reference to the text. Please do not use vertical lines to separate columns. Use brief column headings, with units of measurement in parentheses; define all abbreviations in table footnotes. Use Footnote symbols: †, ‡, §, ¶, (in that order). Reserve *, ** and *** for p values. Identify statistical measures e.g. M, SD, SEM in the headings using appropriate statistical notation outlined in the Publication Manual of the American Psychological Association (6th ed.).

n) **Figure Legends**. Legends should be concise but comprehensive – the figure and legend must be understandable without reference to the text. Define any symbols used as well as abbreviations and units of measurement.

Preparing Figures: Although we encourage authors to publish the highest-quality figures possible, for peer-review purposes we can accept a wide variety of formats, sizes, and resolutions.

Click here for basic figure requirements for initial peer review, and high resolution publication figure requirements.

Colour Figures: Figures submitted in colour may be reproduced in colour online free of charge. Please note it is preferable to supply line figures (e.g. graphs and charts) in black and white so they remain legible if printed by a reader in black and white. If you wish to have figures printed in colour in hard copies of the journal, a fee will be charged by the Publisher.

Qualitative Reports

Qualitative research encompasses various paradigms for reporting primarily textual data. Although visual and graphical data are increasingly included in qualitative research. *Australian Psychologist* requires high standards of research and reporting to ensure research quality and social relevance of findings and interpretations. Although there are differences in the conduct of research between qualitative and quantitative research, there are similarities in reporting. Respect for participants is paramount.

Important publication factors include:

a) Research quality achieved through open-ended, meaningful questions to achieve rich responses. In the case of deductive logic, seeking disconfirmation, rather than confirmation, of theory/hypotheses;

b) The depth and length of interview/focus group data, describing data collection method/s (i.e., open-ended, flexible format; structured interview with pre-determined set of questions);

c) The variety of evidence, sampled from multiple and different participants and use of other data forms where relevant (i.e., field notes, site documents, participant observation;

d) The use of data sources quotes/excerpts; and

e) Attention to rigour via credibility checks, attending to findings trustworthiness/dependability, authors perspective/reflexivity, and a description of context to

allow transferability of findings assessments. Refer to Empirical Reports sections (a) title page, (b) abstract, and (g) to (n) for further specifications on manuscripts.

Case Studies

Australian Psychologist values Case Studies as an important aspect of psychological practice development, adding depth to practitioners knowledge and skill. Case Studies develop theory and practice, and extend upon empirical work in psychological practice, including individual clients, groups, or organisations. Please provide an objective account of the case, related variables, diagnostic features, interventions observed and measured effects, and any possible alternative explanations for observed variables. Give careful attention to ethical and legal considerations of reporting Case Studies, and abide by the Australian Psychological Society's *Code of Ethics*. Case Studies must include a statement that written informed consent was obtained from the subject/s. All efforts must be taken to anonymise/exclude demographic/identifying information less relevant to case presentation (e.g., employment type, location, gender, age, ethnicity, cultural identification). Where subject/s are under 18, the statement must show consent from legal guardians for Case Study procedure and publication.

Case Studies presentation should contain:

a) Case Context and Method: including case selection rationale , methodological strategies used to enhance study rigour, Case Study setting information, and confidentiality.

b) Practitioner Description: including demographic information, theoretical orientation, educational attainment, and relevant experience.

c) Client/s Description: including demographic/diagnostic information; case conceptualisation, including client's problems, goals, strengths, and history. Note: 'client' refers to individual clients, groups, communities, or organisations.

d) Formulation: a link between guiding conceptions of the client and previous research publications and the psychologist's previous practical experience.

e) Course of psychological service, including information on the alliance and relationship built between client and psychologist, assessment, intervention, and description of any strains encountered in the professional relationship with the consulting psychologist. Other useful information includes interactions between client and psychologist, interventions and strategies the psychologist used and client reaction (the best method being transcripts of important interactions).

f) Monitoring of psychological service and use of feedback information: if feedback was used, the report should consist of; i) psychologist completed and self-report questionnaires, ii) peer feedback, iii) psychologist self-reflection, and iv) feedback from professionals who have previously or concurrently worked with the client (consistent with the Australian Psychological Society's Code of Ethics). Case studies without appropriate evaluation of psychological services (i.e., using psychometrically based assessments) cannot be published.

g) Concluding evaluation of the outcome of service and its process: including information on reaching client goals and alleviating presenting problems at conclusion of service/follow-up, strengths and weaknesses of the approach, and funding issues. Discussion of the case in relation to previously reported cases, research and theory, and possible hypotheses or recommendations for practice should also be included.

Case Studies must follow *Australian Psychologist*'s standard publication submission format (ie title page, abstract, reference list, tables, figures). Refer to *Empirical Reports* sections (a) title page, (b) abstract, and (g) to (n) for further specifications on manuscripts.

Reviews (Quantitative and Narrative)

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circumstantially. Please include the best-quality evidence (e.g., randomised controlled trials and meta-analyses). Novel findings may be included when especially relevant and justified. Include an impartial discussion surrounding the evidence and any controversies within the research. If using unpublished data, a source must be provided (e.g., registered trial, unpublished doctoral dissertation, etc.).

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