Review of Refugee Mental Health Interventions Following Resettlement: Best Practices and Recommendations

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Abstract

There are increasing numbers of refugees worldwide, with approximately 16 million refugees in 2007 and over 2.5 million refugees resettled in the United States since the start of its humanitarian program. Psychologists and other health professionals who deliver mental health services for individuals from refugee backgrounds need to have confidence that the therapeutic interventions they employ are appropriate and effective for the clients with whom they work. The current review briefly surveys refugee research, examines empirical evaluations of therapeutic interventions in resettlement contexts, and provides recommendations for best practices and future directions in resettlement countries. The resettlement interventions found to be most effective typically target culturally homogeneous client samples and demonstrate moderate to large outcome effects on aspects of traumatic stress and anxiety reduction. Further evaluations of the array of psychotherapeutic, psychosocial, pharmacological, and other therapeutic approaches, including psycho-educational and community-based interventions that facilitate personal and community growth and change, are encouraged. There is a need for increased awareness, training and funding to implement longitudinal interventions that work collaboratively with clients from refugee backgrounds through the stages of resettlement.

Keywords: refugee, mental health, intervention, resettlement

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There is an ongoing need for development of culturally appropriate mental health services for socially under-included and marginalized populations. Individuals from refugee backgrounds, many of whom have experienced persecution and forced migration in their country of origin and subsequent social exclusion and discrimination in the country of their resettlement, constitute such a population. However, working with individuals from refugee backgrounds (hereafter refugees) presents psychologists and other health professionals with a unique set of challenges that distinguish refugees' mental health service needs from those of other underserved populations and highlight refugees' common service needs, despite their social, cultural and historical diversity. For a start, their experiences of persecution, physical and emotional trauma, and forced relocation predispose many of them to symptoms of psychological disturbance prior to and following resettlement and make their experiences different from those of voluntary migrants. Moreover, the time-limited services to which they have access following resettlement must work to support refugees psychologically, educationally, financially and socially which demands integrative care and flexibility in responding to the diverse needs of heterogeneous refugee groups in ways that correspond with cultural beliefs and norms. In light of this unique set of challenges, there is an ongoing need for information on the mental health and psycho-educational interventions that have been evaluated with refugee clients and for assessing their effectiveness in not only reducing symptoms of psychological trauma but also enhancing qualities of psychological and social wellbeing. This review briefly examines this unique set of challenges, reviews existing, evaluated interventions in resettlement countries, and makes recommendations for future directions for mental health interventions with refugee clients.

According to the United Nations 1951 Convention on the status of refugees, refugees are

persons who have crossed an international boundary because they are unable or unwilling to avail themselves of the protection of their former country due to a well-founded fear of persecution based on: race; religion; nationality; membership of a particular social group; or political opinion (Article 1). In 2007, there were an estimated 16 million refugees worldwide (UNHCR, 2008) for whom the UNHCR identifies three major durable solutions: voluntary repatriation; local integration in the country of first asylum; and third country resettlement. In 2006, there were 71,700 refugees resettled through humanitarian programs in 15 resettlement countries, with the largest sponsors being the United States (41,300), Australia (13,400), and Canada (10,700) (UNHCR, 2007). In 2006 alone, refugees from approximately 70 different countries were resettled in the United States (Office of Refugee Resettlement, 2007).

The accompanying diversity of cultural backgrounds, pre-flight trauma and flight experiences presents challenges for mental health practitioners seeking to educate themselves about the conditions and cultures within presenting clients' countries of origin. The ever-changing nature of resettlement programs poses significant challenges for effective, efficient service delivery and for the development and evaluation of mental health programs. These include concerns about the cultural appropriateness of psychological assessment techniques, the cultural competence of personnel who conduct assessments, linguistic demands, and cultural barriers which may impede access, utilization and effectiveness of services (Paniagua, 2005; Sue, Zane, Nagayama Hall, & Berger, 2008). Examples abound of cross-cultural similarities and differences in the presentation, meaning and appropriate methods of responding to symptoms of distress (Kleinman, 1988) and interpretation and community liaison efforts provide two means to address these concerns. Through active collaboration with interpreting staff and employing community liaison approaches in service settings, some of the cross-cultural similarities and differences can be identified, highlighted and processed to enhance service delivery and

communication, more generally. In light of these challenges, the current review surveys evaluated mental health interventions in resettlement countries with the aim of understanding the strengths and weaknesses of current best practices.

Prevalence, Presentation and Meaning of Psychological Distress and Trauma

Refugees have an elevated risk of mental ill health in the resettlement stage as a consequence of the significant personal disruption and experiences of torture, trauma, and loss that many have experienced. Overall, refugees show greater levels of overall psychological disturbance than the general population (Fazel, Wheeler, & Danesh, 2005; Porter & Haslam, 2005), including higher rates of Major Depressive Disorder and Posttraumatic Stress Disorder (PTSD). However, specific rates of psychopathology among refugee samples have varied tremendously; some studies have found rates of psychopathology to be lower than in the general population. Different outcomes from prevalence studies may result from a variety of methodological concerns: using different measures and diagnostic cut-offs in assessment of trauma and other psychological symptoms; limitations of comparing across refugee cohorts; using culturally insensitive assessment instruments; cohort variations in levels of traumatic exposure; sampling bias; and sample sizes (see Davidson, Murray, & Schweitzer, 2008, for a review of prevalence studies).

Moreover, variability across previous studies may be attributable to concerns over the cultural applicability of the ‘trauma model’ and other Western methods of assessment and models of mental health in non-Western populations (Bracken, 2002; Summerfield, 1999). Schweitzer and Steele (2008) have drawn attention to the historical connection between the development of trauma-related stress diagnostic categories and assessment and treatment of Vietnam veterans and resettled South East Asian refugees in the West in the 1980s. Findings of lingering, pervasive, severe stress reactions among those refugee populations have subsequently

formed the basis of a commonly accepted conceptual framework for understanding the refugee reactions and adjustment. This has raised significant criticism of the medicalization of trauma, in which "biomedicine may actually diminish the capacity of human beings to deal with anxiety and suffering, deny their resilience, render them incapacitated by their trauma and indefinitely dependent on external actors for their psychosocial survival" (Gozdziak, 2004, p. 206).

Accordingly, clinicians and researchers have begun to shift the emphasis away from experiences of trauma and symptoms of post-traumatic stress toward understanding refugees' experiences and challenges within the resettlement environment and toward fostering strength, capacity and resilience among individuals and communities (Papadopoulos, 2007). There is increased recognition of the need to take a holistic approach which acknowledges cultural differences, persons in context and the inherent strengths and wisdom within the refugee community. To this end, many advocate for the increased use of qualitative, emic approaches, building upon a rich history of medical anthropology and sociology to understand cultural differences in meaning and distress and to foster culture-specific methods of coping and responding to adversity (de Jong & Van Ommeren, 2009; Dossa, 2009; Gozdziak, 2004; Miller, 1999; von Peter, 2008). In turn, effective interventions can utilize culturally appropriate ways of engaging with refugees that do not pathologize but rather honor cultural systems and values to foster recovery and resilience processes.

Complexity of the Refugee Resettlement Process

Research has often differentiated the pre-flight, flight and resettlement factors involved in the refugee experience. The largest focus to date has been on the pre-flight experience, emphasizing the damaging effects of prior torture and trauma. Studies show that individuals with higher rates of trauma have corresponding increases in severity of mental health symptoms, such as symptoms of PTSD (Carlson & Rosser-Hogan, 1991; Kinzie et al., 1990). The flight

experience, although potentially radically different for individuals and ethnic groups, depending on the duration and conditions of their journey to safety, can compound the symptoms of trauma. Understanding the flight experience is critically important for planning mental health services in the post-flight context, be it resettlement, returning home or living indefinitely in another country.

More recently research and practice have shifted the emphasis to resettlement factors, as they provide a practical target for preventive interventions. In the years following permanent resettlement in a third country, the experience of past trauma is only one of many issues facing refugees (Davidson et al., 2008). In fact, the trauma is frequently not a past phenomenon, but can be ongoing, with family and friends often remaining in refugee camps or combat zones. In addition, refugees must learn to navigate an entirely new community, language and cultural system, while simultaneously coping with the loss of homeland, family and way of life. Overall, mental health symptoms in resettlement appear to have a curvilinear pattern in which symptoms increase during the initial stages of resettlement then gradually decline over time (Beiser, 1988; Tran, Manalo, & Nguyen, 2007). However, individuals who have experienced greater levels of trauma have a greater risk of developing psychological disorders long after resettlement (Steel, Silove, Phan, & Bauman, 2002).

The assumption that service providers will select interventions that best suit the flight experiences and mental health and wellbeing needs of clients from refugee backgrounds may be misplaced. Michelson and Sclare (2009) recently reported on the range of service provided by London-based service for unaccompanied and accompanied minor refugees and asylum seekers entering the United Kingdom. The range of interventions mentioned by service providers included cognitive, systemic, psycho-educational, anxiety-focused, grief-focused and trauma-focused therapies. Despite unaccompanied minors' greater exposure to almost all categories of

traumatic events before their arrival, and despite them being assessed as having higher levels of PTSD, conduct difficulties and bereavement symptoms that accompanied minors, the unaccompanied minors were less likely than their accompanied counterparts to receive cognitive, anxiety-focused or behavior management interventions to address their difficulties; and there was no statistically significant difference between the two groups in terms of their access to trauma-focused interventions. Michelson and Sclare's results suggest a disjunction between the levels of refugees' mental health and wellness needs and the types of service they are offered.

Worse outcomes in resettlement have been linked with post-migration experiences such as changes in social roles (Colic-Peisker & Walker, 2003), unemployment and financial difficulties (Beiser & Hou, 2001) and social isolation (Miller et al., 2002; Mollica et al., 2001). A meta-analysis by Porter and Haslam (2005) found that individuals who had higher levels of education and who experienced larger decreases in socio-economic status following migration had worse outcomes post-migration. Silove (1999) maintained these changes and challenges can be understood as taxing five core adaptive systems: safety, attachment, justice, identity-role, and existential meaning.

Depending on where clients are located in the resettlement process and on their circumstances, practitioner interventions may address a wide range of presenting issues. Gonsalves (1992) maintained that resettlement involves a stage-like unfolding of everyday personal and social challenges (tasks) accompanied by quite specific therapeutic needs. Individual refugees differ in terms of the duration of each stage, depending on the extent to which they successfully manage the everyday challenges and levels of psychological distress that accompany success or failure on those challenges. Gonsalves also proposed that mental health interventions, and the roles of practitioners who deliver them, need to change in accordance with clients' changing therapeutic needs and that therapeutic interventions need to be tried and

evaluated with refugee clients who are at different stages of resettlement. The possibility that different intervention approaches may have differential success depending on the stage of resettlement should not be dismissed.

Establishment of an Evidence Base for Resettlement Interventions

Practice-based evidence in the area of refugee-related interventions is still in its emerging stages despite the availability of a small number of meta-analytic studies examining prevalence of mental health disorders (Fazel, Wheeler, & Danesh, 2005; Porter & Haslam, 2005) and considerable debate about the conceptualization of refugee mental health concerns. Previous reviews of the treatment literature have failed to locate a substantial number of tried and tested interventions designed to enhance mental health and wellbeing among refugee children and adolescents (Birman et al., 2005; Ehntholt & Yule, 2006; Lustig et al., 2004) and adults (Schibel, Fazel, Robb, & Garner, 2002; Schweitzer, Buckley, & Rossi, 2002) and have advocated for more research in the area. In a recent review of PTSD-specific treatment studies conducted by the Institute of Medicine (IOM, 2007), only two studies with refugees (Hinton et al., 2005; Neuner, Schauer, Klaschik, Karunakara, & Elbert, 2004) met the review criteria of well-designed studies. This limited evidence base is characteristic of deficiencies in the evidence base for psychological interventions with ethnic minority populations generally (Bernal & Scharrón-Del-Río, 2001) and may be attributed to the specific challenges involved in conducting such evaluations with refugee populations.

Although several pilot studies, case reviews and small empirical evaluations with refugee clients have been published, there appears to be a noticeable absence of efficacy trials involving rigorous experimental design, internal validity and the use of randomized control groups. Furthermore, published results frequently do not report Effect Sizes (or the information required to calculate Effect Sizes) for key outcome variables, which have been recommended as standard

reporting practice by the APA Task Force on Statistical Inference (Wilkinson et al., 1999) to allow readers to assess the magnitude of outcomes. Effect sizes provide information on the magnitude of effect over and above significance testing which confirms whether or not observed change is likely due to chance. Effect Sizes in the magnitude of d = 0.5-0.8 are considered to be medium – large; d = 0.2-0.5 small – medium; and d = 0-0.2 as very small – small (Cohen, 1988; Kline, 2004). Because of the wide-ranging methods and measures used in the studies reviewed, meta-analytic techniques were not considered to be applicable. Although the effect size data provide important information on the size of change following interventions for a specific study or outcome, effect size data are highly influenced by the design of the study, such as within versus between subjects designs, homogeneous versus heterogeneous samples, and the measures and recruitment strategies employed. Therefore, comparing or determining relative impacts across studies in the current review should be approached with caution.

In order to provide some basis for looking at an aggregate of studies taken together in accordance with guidelines put forth (Wilkinson et al., 1999), this review is based on a search of intervention studies abstracted in PsychLit and PubMed over the last 20 years (a) involving refugees that (b) were empirically evaluated, (c) contained a minimum of 10 participants, and (d) were conducted in resettlement countries. These inclusion criteria provide the opportunity to examine the outcomes of evaluations of resettlement interventions for which there are large enough numbers to draw larger conclusions on refugee mental health interventions. Twenty-two studies met these inclusion criteria; providing a representative list of the research to date and a practical starting point for practitioners in the resettlement context. Table 1 provides a complete listing of the intervention studies included in this review. The studies generated by this search included 10 child, 3 family, and 9 adult treatment evaluations published between 1993 and 2008. Ten of them engaged clients from single national or ethnic backgrounds while the remaining 12

involved clients from two or more backgrounds. The studies employed a wide variety of treatment methods: Cognitive Behavior Therapy (CBT); Eye-Movement Desensitization and Reprocessing (EMDR); pharmacotherapy; expressive, exposure, and testimonial therapies; and multi-family and empowerment mutual learning groups; and individualized therapy based on supportive, psychoanalytical orientations. Eleven of them targeted posttraumatic stress as the treatment focus, 10 included a control group, and 3 included treatment comparison groups. Seven studies reported developing the intervention in active collaboration with members of the target refugee community and 12 studies described, to varying degrees, ways in which culture influenced the rationale, development and/or adaptation of the intervention. Only four studies reported Effect Sizes while four did not include sufficient information to calculate Effect Sizes. Effect Sizes were calculated for the remaining articles to obtain additional information on the magnitude of change following treatment; however, several estimates may be inflated due to small sample sizes ($n < 20$) and use of dependent samples in the form of pre-post intervention measures rather than control groups to calculate estimates.

Effectiveness of Resettlement Interventions

CBT was the most commonly evaluated treatment method. There is some evidence, albeit inconsistent across the studies, that CBT separately in six studies (Barrett, Moore, & Sonderegger, 2000; d'Ardenne, Ruaro, Cestari, Fakhoury, & Priebe, 2007; Ehntholt, Smith, & Yule, 2005; Fox, Rossetti, Burns, & Popovich, 2005; Hinton et al., 2004, 2005; Paunovic & Ost, 2001) or in combination with pharmacological therapy in one study (Otto et al., 2003) is very effective (Effect Size > 0.5) in reducing symptoms of traumatic and migration stress, as assessed by a variety of measures across studies. Evidence for strong effects (Effect Size > 0.5) post-resettlement of other intervention techniques such as EMDR (Oras, de Ezpeleta, & Ahmad, 2004), exposure therapy (Paunovic & Ost, 2001), and stand alone pharmacological therapies

(Smajkic et al., 2001) on reduction of traumatic stress, as assessed by various PTSD scales, the Beck Depression Inventory, or the Hamilton indices, at this stage relies on there being a single study involving each treatment method. Three of the better designed studies focusing on a specific ethnic group tended to have larger Effect Sizes (Barrett et al., 2000; Hinton et al., 2005; Smajkic et al., 2001). The results for CBT and the other interventions should be treated with caution because some of the studies involved small sample sizes (Barrett et al., 2000; Ehntholt et al., 2005; Hinton et al., 2004; Otto et al., 2003; Paunovic & Ost, 2001) and/or did not include a control group (Fox et al., 2005; Paunovic & Ost, 2001). The frequency of CBT interventions in the current review indicates an emphasis on adapting Western interventions that have been recommended for the reduction of symptoms of PTSD for use with refugee populations.

Four evaluated studies of expressive therapies (Baker & Jones, 2006; Rousseau, Drapeau, Lacroix, Bagilishya, & Heusch, 2005; Rousseau et al., 2007; Rousseau, Benoit, Lacroix, & Gauthier, 2008) and three family and community interventions (Goodkind, 2005; O'Shea et al., 2000; Weine et al., 2003) demonstrated moderate to large effect sizes depending on the outcome variables being assessed; but these outcomes are with small sample sizes using subjects as their own controls. There were insufficient statistical data to judge the effectiveness of testimonial therapy (Weine, Kulenovic, Pavkovic, & Gibbons, 1998), a family group intervention (Weine et al., 2008), a Coping Skills program based on Stress Inoculation Training (Snodgrass et al., 1993), and an evaluation of a community-based comprehensive services program (Birman et al., 2008). The absence of information on their effectiveness does not invalidate these interventions but rather indicates the need for further evaluation.

Empirical evaluation of a school-based mental health intervention (Fazel et al., 2009) showed that children from refugee backgrounds, while having more mental health symptoms than United Kingdom immigrant and Caucasian controls following the intervention, still

displayed fewer overall and peer problem symptoms and more pro-social behavior (as measured on the SDQ) post-intervention compared with their pre-intervention baseline. Effect size scores when comparing refugee children to other ethnic minority students were moderate to large while comparisons with Caucasian controls yielded small to medium effect sizes. Refugee children who were direct therapeutic recipients benefited more than refugee children who received indirect guidance from teachers.

In 12 articles, the authors described ways in which they incorporated aspects of culture and placed emphasis on adapting or developing new intervention programs to meet the specific needs and backgrounds of refugee groups. Some described collaborative efforts with refugee communities over periods of years in which the programs and interventions evolved (Birman, et al., 2008; Goodkind, 2006; Weine, 2003, 2008). Others provided less detailed descriptions of consultations with community members to ensure the program was culturally sensitive (Fox et al., 2005; Hinton et al., 2004, 2005), or of incorporation of aspects of culture into the rationale and development of the intervention (Baker & Jones, 2006; Rousseau et al, 2005, 2007; Snodgrass et al., 1993; Weine et al., 1998). Articles which did not explicitly mention the role of culture typically applied PTSD treatments validated with other populations to refugees (e.g. Barrett et al., 2000; Ehntholt et al., 2005).

Limitations of Research Findings

The above review examined a number of therapeutic interventions designed to reduce refugees' symptoms of psychological distress and increase psychological wellbeing following resettlement. There are methodological limitations associated with the large majority of the intervention studies and, while the results suggest that interventions reliably reduced refugee clients' symptoms of traumatic and migration stress, the results themselves do not provide a more detailed understanding of the mechanisms contributing to symptom reduction. There is the

need for additional well-designed, empirically validated, and culturally appropriate therapeutic interventions that also examine carefully the specific therapeutic processes associated with increasing resettled refugees' mental health and wellbeing.

Nearly half of the studies employed CBT techniques, highlighting the aforementioned emphasis in the field on the trauma model and the adaptation of existing Western mental health interventions. Several CBT and pharmacological interventions produced strong effects and further testing of these intervention approaches with clients of other cultural backgrounds is recommended. However, these findings are limited to specific groups, such as CBT interventions for young clients of Yugoslavian origin (Barrett et al., 2000) and Cambodian adult clients (Hinton et al., 2005), and researchers and practitioners must keep in mind the potential cultural ill-fit and iatrogenic effects of cognitive-behavioral, pharmacological and other Western interventions (see Office of Refugee Resettlement, 2007) and the cultural factors which may influence responses to treatment.

Three of the studies involving CBT and pharmacotherapy, for which strong effects were found, were interventions with ethnically homogenous client groups. Evidence for their effectiveness is consistent with the findings of a meta-analytic review of culturally adapted mental health interventions conducted by Griner and Smith (2006), which concluded that mental health programs targeting culturally homogenous client groups were four times more effective than those targeting culturally heterogeneous client groups. In addition, they found programs provided in peoples' original language were twice as effective as those delivered in a second or other language. This trend emphasizes the importance of culturally tailoring known, effective interventions in response to clients' cultural and resettlement backgrounds and experiences; and it suggests there are advantages in providing such interventions on a group-specific basis. It raises the question, however, about how to design, conduct and evaluate culturally targeted

interventions that permit cross-study comparisons and which may need to be delivered simultaneously for refugee groups from diverse cultural backgrounds; particularly as aspects of that background need to be taken into account when developing and evaluating the treatment.

The paucity of evaluations of effective interventions seems to arise from the challenges in conducting such research. In particular, the cultural heterogeneity of incoming refugee groups places significant demands on service providers and researchers attempting to respond simultaneously to new cultural, linguistic and cohort-specific concerns. In turn, this diversity reduces the capacity to conduct gold standard empirical evaluations of interventions, which often are developed and implemented as a necessary response to the influx of new cultural groups who have been forcibly displaced within their countries of origin or finally processed in their countries of first asylum. Birman et al. (2008) advocate for "practice-based evidence" by evaluating existing multi-ethnic refugee community services as opposed to developing clinical trials to evaluate specific modalities. They reported reductions in symptoms based on clinician-report among refugee children following the provision of a range of services including individual, group and family counseling, psychiatric services, case management and other support services. The practice-based evidentiary approach offers guidance and methodologies for practitioners seeking to evaluate existing interventions in order to improve their cultural relevance and clinical efficiency.

This review acknowledges that a very small percentage (less than 1%) of all *persons of concern* to the UNHCR (2007; 2008) are resettled in host countries through federal humanitarian programs despite the overwhelming emphasis of psychological literature being on the small minority of resettled refugees. The needs of the remaining 66 million *persons of concern* worldwide, which are both similar to and different than their resettled counterparts, demand greater international attention and resources. Notwithstanding, it is to the development, delivery

and evaluation of interventions for resettled refugees that the current review is specifically relevant, and for good reason. Depending on the socio-cultural contexts in which resettlement takes place, resettled refugees often face a unique set of challenges and stresses related to acculturation into a new cultural setting, experiences of discrimination, physical safety concerns, and ongoing educational, financial and employment hardships that are encountered in the course of rebuilding and recovery (Davidson et al., 2008). Although there may be some commonalities in refugees' resettlement experiences, the effectiveness of mental health interventions following resettlement is likely to be dependent on the extent to which those interventions relate directly to the educational, socio-economic, and socio-political stresses that resettled refugees encounter as well as to their ability to alleviate the lingering symptoms of traumatic stress.

This targeted focus on resettlement may be enriched by related research with internally displaced persons and those who have fled to countries of first asylum, with whom some very promising studies have been conducted. Interpersonal Therapy in group formats (IPT-G; Bolton et al., 2007; Bolton et al. 2003) and Narrative Exposure Therapy (NET; Neuner et al., 2004) have been assessed through well-designed clinical trials and been shown to reduce symptoms of depression (IPT-G) and PTSD (NET) significantly. These studies were not included in the current review because they were not conducted in the context of resettlement; however, they involve interventions that emphasize culturally important themes, such as the role of social relationships and narrative in the process of healing. They provide valuable exemplars of interventions with forcibly displaced persons, suggesting that there is a need for further implementation and evaluation of IPT-G and NET in resettlement settings. Moreover, the studies illustrate ways in which culturally-informed interventions can be efficiently implemented and evaluated in real world settings.

Implications for Research, Practice and Service Delivery

Much more needs to be done to enhance mental health services for people from a refugee background by developing culturally appropriate interventions which tangibly benefit distressed refugee clients by seeking to relieve their distress as soon as possible. Accumulation of practice-based evidence for effective interventions, to which this review contributes, is important in achieving that primary goal. Refugee clients following resettlement may struggle to overcome not only the long-term psychological impacts of threats to personal safety and social and cultural dislocation but also additional social, linguistic, educational and vocational challenges and accompanying acculturative stresses. Given the long-term psychological impacts, interventions which continue to evaluate and demonstrate reduction in symptoms over the course of resettlement are needed.

Considerable emphasis has been given more recently to the need for interventions that rely less on medical models of psychological distress that unduly emphasize stress-related trauma and more on psychosocial models that promote positive personal change (Summerfield, 1999; Papadopoulus, 2007). Such interventions aim to "develop a sense of stability, safety and trust, as well as to [assist clients to] regain a sense of control over their lives" (Ehntholt & Yule, 2006, p. 1202). This may best be achieved by engaging individual clients, families, and whole communities in programs that place emphasis on individual and social growth and change in response to adversity. Programs that give due acknowledgement to community leaders and indigenous wisdom, help build community capacity, ensure cultural salience and significance, and work to minimize power differentials between health professionals and local healing and support systems, are more likely to facilitate what Papadopoulus (2007) has labeled adversity-activated development. Such partnerships may also serve to increase the levels of mental health utilization among refugee populations by decreasing stigma and engaging in culturally

meaningful ways (e.g. see Nadeau & Measham, 2005; Wong et al., 2006). Evaluating the ways in which these community partnerships enhance treatment outcomes may possibly garner increased funding and support for these efforts; to that end, evaluation and dissemination of effective practices should be part of all future interventions.

Obtaining and listening to refugees' personal testimonies of adversity has also been mooted as an essential component of personal and social healing. The study by Weine et al. (1998) of a testimonial therapy intervention offers some support for these testimonial approaches. Although there is a strong argument, therefore, for delivering interventions that seek to develop individual and community strength and resilience, results of our review suggest few such programs have been empirically evaluated and those that were have garnered mixed to moderate results. The absence of consistently strong effects following these interventions may be due to a variety of factors including the design of the interventions, their social and cultural suitability, their appropriateness for clients at a particular stage of resettlement, the cultural competence of the service providers, the measurability of the anticipated outcomes, and the reliability and validity of the assessment measures for the cultural groups in question.

Finally, it would seem that none of the interventions included in the review has adopted a longitudinal philosophy or methodology that reflects individual clients' and communities' stage-like trajectories toward healing and growth following resettlement (Gonsalves, 1992).

When working with refugees, practitioners are forced to start "rethinking a familiar model" of psychotherapy (Miller, 1999) to accommodate clients' cultural and linguistic backgrounds, including meanings of emotion, suffering, trauma and support in their original and host cultural contexts. Although the current review of empirical evaluations provides a starting point for future interventions, it is also important to recognize that the resettlement needs of refugees from widely different cultural and ethnic backgrounds may be dissimilar (Measham,

Rousseau, & Nadeau, 2005; Morris & Silove, 1992). The dynamics of mental health interventions become more complex when service providers work with individuals from cultural and linguistic backgrounds that are different from the provider's background. Those complexities are magnified if providers are delivering services for culturally heterogeneous client groups, which is typically the case but which, on the basis of the intervention studies reviewed here, is less likely to result in enhanced service effectiveness. In these circumstances, problems with miscommunication may arise frequently (Guerin, Guerin, Diiriye, & Yates, 2004). Access to regular, expert interpreting services may be limited (Century, Leavey, & Payne, 2007), necessitating further employment and training of interpreters (Miller, Martell, Pazdirek, Caruth, & Lopez, 2005), bicultural workers and cultural liaison officers (Gozdziak, 2004). Providing competent services often comes at significant financial costs and there is need for increased funding and education of the larger community on refugee issues, particularly in an era in which many refugee programs have reduced fiscal support.

Furthermore, work with refugees falls under a larger mandate for cultural competence. Sue et al. (2008) emphasize the need for practitioners to be aware of their own cultural beliefs and values, have knowledge of the client's culture, and possess the skills to intervene in clinically meaningful and appropriate ways. Relevant cultural knowledge may be accessed through cognate literatures, such as cultural anthropology, as well as at refugee-specific websites and outputs provide useful information for practitioners. The Cultural Orientation Resource Center (http://www.cal.org/co/) has compiled culture profiles which provide a basic introduction to the social structure, language, geography and history of various cultural groups. The International Rehabilitation Council for Torture Victims (http://www.irct.org/Default.aspx?ID=1) also provides links to rehabilitation centers around the world. "Developing professional competence in working with diverse clients is an ethical

mandate, a demographic necessity, and a challenge for many professionals" (Ecklund & Johnson, 2007, p. 360) and practitioners should be watchful for signs of secondary trauma as they are often exposed to verbal accounts of the torture, trauma and immense suffering experienced by their refugee clients.

A limitation highlighted by the review was the absence of evaluated interventions in resettlement that involved the use of a randomized control group. This is unsurprising because randomized controlled studies (RCT's), as well as being costly, impose a number of ethically and practically unacceptable conditions on service providers and client communities, whose immediate mental health, social, educational and financial needs should be regarded as paramount. Concerns about such conditions are particularly salient when working with refugee populations. Notwithstanding, Bolton and Betancourt (2004) advocate the use of RCT's and wait-list control groups given minimal impacts of delaying treatment and potential cost-saving effects for not implementing an ineffectual treatment to all prospective participants. Bolton's research also underscores the ways in which continued efforts in developing, implementing and disseminating effective mental health interventions can merge scientific rigor with culturally meaningful and real-world applications that foster inherent strengths and healing processes within refugee communities.

Very few of the national and cultural groupings of refugees who are currently being resettled were represented in those evaluated intervention studies. There is an emphasis on evaluated interventions with refugees from Southeast Asia and the former Yugoslavia and there is a need to understand and address the paucity of research with other groups (Lustig et al., 2003). Taking into account training requirements for ensuring that service providers are practicing in a culturally competent fashion, more practice-based evidence is required on the array of psychotherapeutic, psychosocial, pharmacological, and other therapeutic approaches,

including psycho-educational and community-based interventions that aim to facilitate personal and community growth and change during the refugee resettlement phase. Effect Sizes should be reported as a matter of course for outcome variables. Longitudinal interventions that assist clients through the stages of resettlement should be implemented and their outcomes compared with short-term, targeted, purpose-specific interventions.

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Table 1

Evaluated Interventions for Refugees in Settlement

Reference	Treatment	Population	Sample Size	Effect Size
Baker & Jones, 2006*	Music therapy	Refugee children (age = 13.9)	31	NSA
Barrett et al., 2000	CBT	Former Yugoslavian youth (age = 16.2)	20	YSR internal (d = .96; r = .43), YSR Anx/Dep (d = 1.5; r = .6)
Birman et al., 2008	Comprehensive Services Model	Refugee children (age = 11)	68	NSA
D'Ardenne et al., 2007	CBT	Adult refugees (age = n/a)	44 with interpreter; 36 without interpreters	*With interpreters* IES (d = .4; r = .2), BDI (d = .64; r = .3) *No interpreters* IES (d = .46; r = .23), BDI (d = .6, r = .16)
Ehntholt et al., 2005	CBT	Asylum seeker/	26	IES total (d = .88; r = .4), SDQ total (d = .01, r = 0),

Reference	Treatment	Population	Sample Size	Effect Size
		refugee youth (age = 12.9)		DSRS (*d* = .26; *r* = .13)
Fazel et al., 2009**	School-based mental health intervention	Refugee children (age 5-17)	47	*Comparison with Indigenous white* SDQ total T-R (*d* =..28, *r* = .14) *Comparison with Ethnic minority* SDQ total T-R (*d* =.67, *r* = .32)
Fox et al., 2005	CBT	Vietnamese/ Cambodian children (age = 10)	58	CDI (*d* = 1.0; *r* = .45)
Goodkind, 2005	Mutual learning groups	Hmong adults (age = 41)	28	QOL (*d* = .4; *r* = .2), Eng. Proficiency (*d* = .67; *r* = .32)

Reference	Treatment	Population	Sample Size	Effect Size
Hinton et al., 2004#	CBT	Cambodian adults (age = n/a)	12	HTQ (*d* = 2.5; *r* = .78) ASI (*d* = 4.3; *r* = .91)
Hinton et al., 2005#	CBT	Cambodian adults (age = 51.8)	40	CAPS (*d* = 2.17; *r* = .74), SCL (*d* = 2.77; *r* = .81), ASI (*d* = 3.78; *r* = .88)
Oras, de Ezpeleta, & Ahmad, 2004	EMDR	Refugee children (age = 11.8)	13	PTSS-C Total (*d* = 1.76; *r* = .66), PTSD-related (*d* = 2.5; *r* = .78) PTSD non-related (*d* = 1.48; *r* = .59)
O'Shea et al., 2000	School-based family program	Refugee children and parents, (age = 9.6)	14	SDQ (*d* = 1.04; *r* = .46) (*based on 7 completing post-tests)
Otto et al., 2003#	Group CBT + PT	Cambodian adult females (age = 47.2)	10	HSCL anx (*d* = .59; *r* = .28), HSCL dep (*d* = 0), HSCL somat (*d* = .62; *r* = .3), ASI Khmer items (*d* = 1.77; *r* = .66)
Paunovic & Ost, 2001	CBT and E	Adult refugees (age = 37.9)	16	*CBT:* CAPS total (*d* = 1.56; *r* = .62), Ham Anx (*d* = 1.52; *r* = .61), Ham Dep (*d* = 1.72; *r* = .65)

Reference	Treatment	Population	Sample Size	Effect Size
				Exposure: CAPS total (*d* = 2.48; *r* = .78), Ham Anx (*d* = 2.2; *r* = .74), Ham Dep (*d* = 2.49; *r* = .78)
Rousseau et al., 2005	Creative Expression Workshops	Immigrant and refugee children (age = 9.8)	138	NSA
Rousseau et al., 2007	Drama Therapy Workshops	Immigrant and refugee children (age = 14.5)	123	SDQ total S-R (*d* = .43; *r* = .21), SDQ total T-R (*d* = .05; *r* = .02)
Rousseau et al., 2008#	Sandplay Program	Multi-ethnic school (age = 5.3)	105	South Asian, victims of violence only: SDQ total P-R (*d* = 1.16, *r* = .50)
Smajkic et al., 2001	PT: Sertraline, Paroxetine, Venlafaxine	Bosnian refugees (age = 51.3)	32	BDI (*d* = .96; *r* = .43), PTSD Reexp (*d* = 1.08; *r* = .48), PTSD Avoid (*d* = 1.07; *r* = .48), PTSD Sev (*d* = 1.35; *r* = .56)

Reference	Treatment	Population	Sample Size	Effect Size
Snodgrass et al., 1993	Coping Skills Model (adaptation of SIT)	Vietnamese undergraduate students (age = 19.3)	17	NSA
Weine et al., 1998	Testimonial	Bosnian refugees (age = 45.1)	20	NSA
Weine et al., 2003	Family group intervention	Kosovar families (age = 36.4)	42 families	SS (d = 1.07; r = .47), Hardiness (d = .56; r = .27), Knowledge services (d = .72; r = .34)
Weine et al., 2008	Family group intervention	Bosnian families (age =37.7)	197	NSA

Key to Table 1: Age = mean age of participants; ASI = Anxiety Sensitivity Index; Anx = Anxiety symptoms; Avoid = Avoidance symptoms; BDI= Beck Depression Inventory; CAPS = Clinician Administered PTSD Scale; CBT = Cognitive Behavioural Therapy; CDI = Children's Depression Inventory; Dep = Depression symptoms; DSRS = Depression Self-Rating Scale; E = Exposure Therapy;

EMDR = Eye Movement Desensitization and Reprocessing; Ham Anx = Hamilton Anxiety; Ham Dep = Hamilton Depression; HSCL = Hopkins Symptom Checklist; HTQ = Harvard Trauma Questionnaire; IES = Impact of Events Scale; n/a = information not provided; NSA = Insufficient statistical data available; P-R = Parent-report; PT = Psychopharmacological Treatment; PTSD = Posttraumatic Stress Disorder; PTSS-C = Posttraumatic Stress Symptom Scale for Children; QOL = Quality of Life; Reexp = Reexperiencing symptoms; SS = Social Support; SCL = Symptom Checklist; SDQ = Strengths & Difficulties Questionnaire; Sev = Severity of symptoms; SIT = Stress Intervention Module; Somat = Somatic symptoms; S-R = Self-report; T-R = Teacher-report; YSR = Youth Self-Report; *Calculated Effect Sizes based on baseline scores and following the first 5-week intervention group versus controls; ** Calculated effect size following a 9-month intervention for group versus controls and pre-post measures; # Measures of Effect Sizes were provided by the authors.