The impact of pre and post-migration stressors on the psychological wellbeing of refugees

Kenneth Carswell

D.Clin.Psy Thesis

(VOLUME 1)

2007

University College London

ProQuest LLC
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106-1346

Overview

Part one of this thesis reviews the literature on the mental health of refugees. The first section outlines definitions and legal issues. This is followed by a review of epidemiological studies, conducted in both developed and developing countries, and criticisms of the psychiatric model as applied to refugees. There is a focus on risk factors for mental health, with particular attention to the impact of the post-migration environment. The final section considers interventions for refugees, with a review of studies investigating the use of clinical and ecological service models.

Part two is an empirical study that investigates the impact of pre and post-migratory factors on the psychological wellbeing of refugees. Participants (n=41) completed self-report measures of post-migratory factors, psychological wellbeing, self rated health and social support. The results showed that post-migratory problems had a stronger relationship to psychopathology than the number of traumatic events, whilst for self-rated health, the number of traumas showed the stronger relationship. The implications of these results for policy, clinical practice and research are discussed.

Part three is a critical appraisal focused on three key areas related to research and practice with refugees. These are the ethics of refugee research, the use of adapted measures in cross-cultural research and the

political nature of work with refugees, with a wider consideration of the role of clinical psychology in informing government policy.

Table of contents

List of tables

Acknowledgements

I would like to thank my supervisors, Chris Barker and Pennie Blackburn for their help and support on all aspects of this thesis. My thanks also go to all the people and organisations that helped with the research, in particular clinicians and admin staff at the two clinics where recruitment primarily took place. Their support and comments greatly improved the quality of the study.

The UCL Graduate School Research Project Fund is gratefully acknowledged for generous funding which made the use of interpreters possible.

I would also like to thank my friends and family, who have offered me support and encouragement throughout the process, as well as many much needed conversations and fun nights out.

A particularly big thank you goes to my partner Diana for always being there for me, happy times away from the thesis and putting up with all the stress. You've been great!

Finally, I would like to thank all the participants who truly made this study possible by sharing with me some very difficult and personal experiences. These stories reminded me of the depth of commitment so many have to the rights and welfare of others, the oppression and persecution experienced by people around the world, and the importance of speaking out against this.

Part 1: Literature Review

Psychological Problems and Clinical Interventions for Refugees and Asylum Seekers

Abstract

Refugees and asylum seekers are at increased risk of mental health problems because of their exposure to traumatic events that accompany individual or population wide human rights abuses. This review has two distinct aims. The first is to assess the literature related to this group considering the rates of mental health problems reported by studies conducted in both developed and developing countries. This will include a review of factors related to increased mental health problems, with a particular focus on the impact of the post-migration environment. The second aim is to review clinical and ecological service models which have been employed with refugees. The review suggests that the mental health of refugees is negatively affected by both exposure to pre-migration trauma and post-migration factors, such as a long asylum application process, restricted economic opportunity and reduced social support. Whilst the literature on interventions is limited, the review suggests that services should address the broad range of problems experienced by refugees in a holistic manner.

Introduction

The effects of war and other large-scale human rights abuses cannot be understated, as they pose a substantial threat to the wellbeing of individuals and society. The disruption of civil order that accompanies these situations

undermines institutions, such as social networks, justice systems, health systems and other support networks (Silove, 1999). Some of those affected by wars or human rights abuses will become internally displaced or seek safety in another country. According to estimates from the United Nations High Commission for Refugees (UNHCR), in 2005 there were approximately 21 million "people of concern" which included refugees, asylum-seekers, internally displaced persons, stateless persons, and others of concern (UNHCR, 2006a). However, due to limited systematic data collection in a number of countries, these figures are likely to underestimate the true number of persons displaced by war, internal conflict and gross human rights abuses (UNHCR, 2006a).

For the individual, the effects of armed conflict and persecution may include a range of life-threatening circumstances such as problems accessing food, water and shelter, the death of friends or family, threats to physical security and torture. Studies have consistently shown that refugees report exposure to a high number of traumatic events, exhibit elevated rates of Posttraumatic Stress Disorder (PTSD) and Major Depression, and report experiencing other severe life stressors related to the upheaval and forced relocation (e.g. Cardozo, Vergara, Agani, & Gotway, 2000; de Jong et al., 2001; Mollica et al., 1993; Turner, Bowie, Dunn, Shapo, & Yule, 2003).

For refugees and asylum seekers who have sought refuge in developed countries, studies have documented the impact of post-migration factors such as asylum procedures, reduced social support and socioeconomic

problems on the mental wellbeing of these already vulnerable individuals (e.g. Gorst-Unsworth & Goldenberg, 1998; Silove, Sinnerbrink, Field, Manicavasagar, & Steel, 1997). In the UK several advocacy groups have voiced concerns that recent changes to UK asylum law may be creating further difficulties for people applying for asylum and may have a detrimental impact on their wellbeing (ICAR, 2006; Refugee Council, 2005).

The present review investigates the psychological health and psychosocial wellbeing of refugees and asylum seekers and seeks to examine levels of trauma and mental health symptomatology. It further addresses some of the controversies in the field and looks at what types of interventions have been found to be effective with refugees in developed countries. The first section addresses definitions and legal aspects. The second section is a review of studies conducted with refugee populations that highlight the extent of the traumas experienced and rates of mental health problems. The third section addresses the pre-migration factors found to be related to mental health problems. The fourth section considers criticisms of the psychiatric model as applied to refugees and asylum seekers. The fifth section reviews the post-migration factors related to poorer outcome in resettlement countries. The final section considers intervention approaches that have been documented from western countries and considers two approaches to service provision: traditional psychotherapeutic clinic based services and broader community and ecological approaches. The review ends with some overall conclusions. Relevant search terms and methods of review will be specified at the beginning of each section.

Definitions and the UK situation

Refugee status is defined by the 1951 Convention relating to the status of refugees (UNHCR, 1992) which has been agreed by 146 of the 191 member states of the United Nations, including the UK (UNHCR, 2006c). Whilst the convention outlines the international legal principles governing asylum, the implementation of the principles and asylum procedures is the responsibility of the individual countries (Ward, 2006). The convention defines a refugee as someone who:

> ...Owing to a well founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it. (UNHCR, 1992, p.8)

In common parlance, 'refugee' refers to someone who has been recognised by a host country as a refugee, 'asylum seeker' refers to someone seeking recognition as a refugee and 'failed asylum seeker' refers to someone who has been deemed by a host country as not meeting the convention criteria. However, the definition of the convention implies that anyone outside of his or her country of nationality with a well-founded fear of persecution is a refugee, regardless of whether this is recognised by a host country. To reflect

the true meaning of the convention, the term refugee will be used for the remainder of the thesis to refer to refugees, asylum seekers and failed asylum seekers, except where making this distinction is necessary.

In 2005 there were approximately nine million refugees worldwide (UNHCR, 2006a). Whilst most refugees are resident in developing countries, approximately one-third seek refuge in a developed nation (UNHCR, 2006b, 2006c). With regards to the UK, at the end of 2004, there were an estimated 290,000 refugees resident in the UK (UNHCR, 2006c), with 30,840 applications for asylum in 2005 (Home Office, 2006a). The Home Office (2006a) estimates that of the applications considered in 2005, eight percent resulted in grants of asylum, 12% led to humanitarian or discretionary leave and a further 12% resulted in allowed appeals, with final decisions on status made within six months for 67% of cases. It is estimated that there are up to 283,500 failed asylum seekers living in the UK (National Audit Office, 2005).

The UK asylum system has undergone substantial revision since 1993 with changes in areas including the detention and fast-tracking of applicants, changes to the support offered to asylum seekers and the granting of temporary refugee status for five years, as opposed to "indefinite leave to remain" as was previously provided. The current system has been outlined in detail by Ward (2006) and forms the basis for the following summary.

Initial applications for asylum are made either at the port of entry or from within the UK. In some cases applicants may be detained, fast tracked or not

eligible for support if they are from a particular country, have arrived from a "safe third country" such as a member state of the European Union, or are judged to be lodging a "late and opportunistic" application. Asylum seekers are not entitled to claim mainstream benefits or work, nor are they covered by homelessness or housing legislation. Instead, applicants who can show they are destitute, or likely to become so, can apply for support from the Border and Immigration Agency[1]. The agency provides financial support equivalent to 70% of the current rate of income support (100% for those under 16 years of age) and can arrange for accommodation (Home Office, 2006b). In order to reduce pressure on services in London and the South-East, applicants who require accommodation and financial support are usually dispersed to accommodation outside of this area, with support being withdrawn if they are unable to provide reasonable cause for not moving to the dispersal area (Home Office, 2005).

Either full refugee status or an alternative form of protection can be granted. Recognition as a refugee leads to an initial five years leave to remain in the UK with leave of between three and five years awarded on other humanitarian or compassionate grounds. The granting of protection brings with it full rights of work, access to benefits, health and public care and eligibility to apply for family reunion. If the application is refused, the applicant is in most cases eligible for appeal to the Asylum and Immigration Tribunal (AIT), an independent judiciary body. However, the right to appeal has been

---

[1] Support was formerly provided by the National Asylum Support Agency.

increasingly restricted with successive legislation, with some applicants having the right of appeal removed (i.e. individuals detained under the fast track process and those with a previous right of appeal). On having an application refused or after exhausting all other forms of appeal, the applicant will be eligible for removal from the UK. In most cases, failed asylum seekers will not be eligible for any form of support prior to leaving the UK, but in some cases, support can be provided to individuals who have had their appeal refused but are unable to return home for reasons outside of their control (Refugee Council, 2004).

Mental health problems and trauma

This section reviews literature related to rates of psychopathology and trauma exposure within war affected and refugee populations in both developed and developing countries. Searches were made using Medline and Psychinfo. Search terms included "refugees or asylum seekers", and terms related to the experience of mental health problems such as "mental disorders, emotional-trauma and posttraumatic stress disorder". Searches were made for literature from 1980. Because of the increased rates of disorders observed in convenience and clinical samples (Silove, 1999) only epidemiological studies or large refugee population studies were included. A total of nine studies were included based on this criterion. A review of reported trauma exposure rates is presented, followed by consideration of the prevalence of mental health problems, risk factors related to psychopathology and limitations of the studies. Criticisms of the application of the psychiatric model to populations affected by war and human rights

abuses are briefly reviewed and discussed before final conclusions are presented.

Exposure to trauma

Studies investigating the mental wellbeing of refugees have consistently reported exposure to a high number of traumatic events. As shown in Table 1, rates of exposure to at least one traumatic event vary from 96% (Mollica et al., 1993) to 20% (Steel, Silove, Phan, & Bauman, 2002), with the majority of studies reporting rates of exposure for at least 50% of the population. With regards to the number of events experienced, Marshall, Schell, Elliott, Berthold and Chun (2005) reported a mean of 15 traumatic events experienced by Cambodian refugees, compared to seven for Bosnian refugees (Mollica et al., 1999) and two for Vietnamese refugees (Steel et al., 2002). The types of events reported differ to some extent depending on the country and population of study, but there is a high degree of consistency. Commonly reported traumatic events include, lack of food, water or shelter, combat situations, forced displacement and being close to death. Torture was reported by between 54% (Marshall et al., 2005) and 1% (Steel et al., 2002) of respondents in the studies, with the majority of studies reporting a rate of at least 10%. Reported rates of traumatic events appeared highest in samples of Cambodians, with Bosnian and Kosovan samples reporting increased rates of exposure to combat situations. There appeared to be no consistent pattern of differences between studies conducted in developed or developing countries.

Table 1: Types and prevalence of traumatic events reported by refugees

Authors	Country & setting	Sample size	Five most commonly reported traumatic events (%)		Torture %	Witnessing murder or combat situation (%)	Mean number of traumatic events
Cardozo et al. (2000)	Randomly selected general population sample Kosovan Albanians	1358	Lack of food or water Combat situation Forced isolation Being close to death Lack of shelter	67 67 64 62 57	49	67	NR
Cardozoa Talley, Burton et al. (2004)	Karenni refugees living in Thai refugee camps	495	Hiding in the jungle Forced relocation Lost property or belongings Lack of food or water Forced labour	79 68 66 53 51	19	22	NR
de Jong et al. (2001)*	Random General population: Ethiopia, Algeria, Cambodia, Gaza.	3048	Youth domestic stress Conflict before age 12 Conflict after age 12 Torture Death or separation in family	29 - 55 3 - 72 59 - 92 8 - 26 5 – 18	8 - 26	NR	NR

* Results are ranges of scores from the four countries

Table 1 cont.

Authors	Country & setting	Sample size	Five most commonly reported traumatic events (%)		Torture %	Witnessing murder or combat situation (%)	Mean number of traumatic events
Lopes Cardozo Bilukha, Gotway Crawford et al. (2004)**	Afghanistan random population sample disabled and non disabled	799 (699 non disabled	Lack of food or water Ill health without access to medical care Lack of shelter Imprisonment Serious injury	56 55 44 17 16	10	41	NR
Marshall et al. (2005)	US, population sample of Cambodian immigrants/refugees	490	Near to death due to starvation Combat situation Forced labour Murder of family or friend Witnessed beatings	99 98 96 90 85	54	98	15
Mollica et al. (1993) Mollica, McInnes, Poole et al. (1998b)	Random sample from Cambodian refugee Camps in Thailand	993	Lack of food or water Forced labour Ill health no medical care Brainwashing Lack of shelter	96 88 87 87 85	36	44	14

** Results for non disabled sample

Table 1 cont.

Authors	Country & setting	Sample size	Five most commonly reported traumatic events (%)		Torture %	Witnessing murder or combat situation (%)	Mean number of traumatic events
Mollica et al. (1999)	Bosnian refugee camps	534	Combat situation Hiding outdoors Confined to home Home being searched Threatened or humiliated	83 63 51 37 34	18	83	7
Steel et al. (2002)	Australia, Population based study Vietnamese	1413	Lack of food or water Other extremely stressful events Fire, flood or other natural disaster Being close to death Life threatening accident	20 18 14 14 13	1	6	2
Turner et al. (2003)	UK, Kosovan refugees at UK reception centres	842	Forced to leave home Combat situation Thought might be killed Threat to self or family Extreme hunger or thirst	97 91 88 89 70	NR	91	NR

There was a degree of variation in the rates of trauma exposure reported in different studies. In the majority of the studies (with the exception of de Jong et al., 2001; Turner et al., 2003) exposure to trauma was assessed using the Harvard Trauma Questionnaire (HTQ), a well-validated and frequently used measure (Mollica, McDonald, Massagli, & Silove, 2004), which would have reduced the possibility that this variation was due to methodological differences. The variation may instead indicate the different geopolitical events in different countries, as shown by the markedly lower rates of trauma reported by Vietnamese refugees compared to other groups, reflecting the more sustained campaigns of violence in these other countries (Steel et al., 2002). A further factor for the low rate of trauma exposure reported by Vietnamese refugees in Steel et al's. (2002) study may have been the increased length of time between the war in Vietnam and being involved in the study. A rough estimate suggests that approximately 25 years would have passed since the war, whereas for Cambodians' in Mollica et al's. (1993) study it would have been approximately 12 years since the genocide conducted by the Khmer Rouge, and perhaps a shorter time frame in other studies. Indeed, de Jong et al. (2001) reported that the highest rates of trauma exposure were reported in countries where conflict was ongoing, suggesting a possible effect of time on recall. Despite these differences, it is nevertheless possible to conclude that with one exception (Steel et al., 2002), the studies reported high rates of exposure to trauma with commonly reported events reflecting the abuses, threats to life and upheaval that accompany war and gross human rights abuses.

Comparing these data to data from developed countries is difficult because of variations in methodologies and the types of traumas investigated. However, some comparison is possible. A review of the epidemiology of PTSD (Lee & Young, 2001) reported lifetime trauma exposure rates from recent major epidemiological studies varying from 25% - 92%, a similar range to that reported by the studies above. However, as the authors note, the types of traumatic events explored varied considerably, with some studies including traumas which were less severe than those investigated in the studies reviewed. The studies reviewed above mostly report mean estimates of exposure to trauma of between six and fifteen events which is substantially higher than the mean of five reported in US samples (e.g. Breslau et al., 1998). This supports the notion that refugees and persons affected by war and human rights abuses experience far greater exposure to traumatic events than populations in developed or peaceful countries.

Rates of mental health problems

Greater understanding of the traumas experienced by refugees has - since the 1980's - led to increased interest in the mental health of populations affected by political violence (Summerfield, 1999). However most research on refugees has taken place in westernised countries, with only limited research conducted in countries where conflict or mass human rights violations have occurred (Silove, 1999). The problems most commonly investigated by these studies are PTSD and depression, with some studies also reporting the prevalence of anxiety symptoms, impaired functioning and health. Table 2 shows the main findings from each study.

Table 2: Prevalence of psychological problems reported by refugees

Authors	Instruments	Relationship of factors to mental health problems	PTSD prevalence %	Depression prevalence %	Anxiety prevalence %
Cardozo et al.(2000)	General Health Questionnaire-28 (GHQ-28) (Goldberg & Hillier, 1979) Harvard Trauma Questionnaire (HTQ) (Mollica et al., 1992) Medical Outcomes Study – 20 (MOS-20) (Ware, Snow, Kosinski, & Gandek, 1997)	Chronic health problems Cumulative trauma Forced separation Older age Previous psychiatric history Murder of family or friend	17	NR	NR
Cardozoa et al. (2004)	Hopkins Symptom Checklist – 25 (HSCL-25) (Mollica, Wyshak, de Marneffe, Khuon, & Lavelle, 1987a) HTQ Medical Outcomes Study 36-Item Short-Form Health Survey (SF-36) (Ware et al., 1997)	Cumulative trauma Exposure to harassment or violence	5	41	42
de Jong et al.(2001)*	Composite International Diagnostic Interview 2.1 (CIDI 2.1) (World Health Organization, 1997) Life events and social history questionnaire (Mollica, Wyshak, & Lavelle, 1987b)	(Relationship found in three or more countries) Conflict events after age 12 Torture	16 – 37	NR	NR

* Results are ranges of scores from the four countries

Table 2 cont.

Authors	Instruments	Relationship of factors to mental health problems	PTSD prevalence %	Depression prevalence %	Anxiety prevalence %
Lopes Cardozo et al.(2004)**	HSCL-25 HTQ SF-36	Cumulative trauma Female gender, Little or no education older age	42	68	72
Marshall et al. (2005)	HTQ Survey of community violence (Richters & Saltzman, 1990) CIDI 2.1 Alcohol Use Disorders Identification Test (AUDIT) (Babor, de la Fuente, Saunders, & Grant, 1992)	Cumulative trauma, Post-migration trauma Older age	62	51	NR
Mollica et al. (1993) Mollica et al. (1998b)	HSCL-25 HTQ Medical outcomes study short form general health survey (Stewart, Hays, & Ware, 1988)	Cumulative trauma	15	55	NR

* Results for non disabled sample

Table 2 cont.

Authors	Instruments	Relationship of factors to mental health problems	PTSD prevalence %	Depression prevalence %	Anxiety prevalence %
Mollica et al. (1999)	HSCL-25 HTQ MOS-20	Associated with disability: Cumulative trauma Chronic medical illness Older age	26	39	NR
Steel et al.(2002)	HTQ CIDI 2.1 Medical outcomes study short form – 12 (Vietnamese version) (Gandek et al., 1998) Phan Vietnamese psychiatric scale (Phan, 1997)	Cumulative trauma, Living alone Post-migration trauma Poor English Unemployed	4	3	5
Turner et al. (2003)	GHQ-28 Beck Depression Inventory (BDI) (Beck, 1996) Beck Anxiety Inventory (BAI) (Beck, 1987) Post-traumatic Diagnostic Scale (PDS) (Foa, Cashman, Jaycox, & Perry, 1997) War Trauma Questionnaire (WTQ) (Macksoud, 1992)	Cumulative trauma (exposure to violence) Family separation Older age	65	44 (scored BDI moderate/ severe)	34 (scored BAI moderate – severe)

The studies reviewed reported markedly different rates of PTSD and other disorders, with the study by Steel et al., (2002) reporting the lowest rates. Depending on the sample in question, rates of PTSD varied between 65% (Turner et al., 2003) and 4% (Steel et al., 2002) for PTSD, with most studies reporting rates between 10% and 40%. Rates of depression varied between 3% (Steel et al., 2002) and 68% (Lopes Cardozo et al., 2004) with most studies reporting rates between 40% and 60%. Fewer studies reported anxiety rates. Those that did reported rates varying from 5% (Steel et al., 2002) to 72% (Lopes Cardozo et al., 2004). Rates of PTSD appeared highest in countries where conflict was ongoing or had recently ended (e.g. Cardozo et al., 2000; de Jong et al., 2001; Lopes Cardozo et al., 2004), but there was little difference in the rates reported by studies in developed or developing countries. The low rate of problems reported by Steel et al. (2002) may be explained by the lower rate of trauma exposure, the length of time since exposure, or cultural variations in the expression of mental health problems.

Epidemiological studies in the US have reported lifetime prevalence of PTSD to be approximately eight percent, (Keane, Marshall, & Taft, 2006), whilst lifetime prevalence of depression has been reported to vary between 3% - 17% in developed countries (Andrade et al., 2003). This is lower than the rates reported in the majority of the studies reviewed above. Whilst it is difficult to directly compare studies because of substantial methodological differences, it is unlikely that this would explain the disparity in results. Rather

the results suggest that refugees and those exposed to conflict are at increased risk of PTSD and depression.

This suggestion is further supported by studies assessing social functioning and health which mostly reported decreased functioning in populations affected by war compared to western samples. Cardozo et al. (2000) reported that social functioning was markedly lower for a population sample from Kosovo than for the US population. Lopes Cardozo et al. (2004) supported this finding, reporting that on four scales of functioning and health, an Afghan population sample scored at least a third lower than the US reference population. However, Mollica et al. (1993) reported that whilst rates of depression and PTSD were 55% and 15% respectively in a sample of Cambodian refugees in a refugee camp in Thailand, social functioning remained well preserved. With regards to the relationship between mental health problems and reduced functioning, an epidemiological survey of residents in Bosnian refugee camps showed that there was no association between PTSD or depressive symptoms and decreased functioning, but there was an independent two-fold increase of risk of disability if symptoms were co-morbid (Mollica et al., 1999).

Factors related to mental health problems and trauma

All the studies reviewed showed a relationship between trauma and mental health problems (Table 2). This was particularly true for PTSD, but was also found for other disorders. Several studies also found a dose-response

association between an increasing number of traumatic events and an increase in symptoms (Cardozo et al., 2000; Cardozoa et al., 2004; de Jong et al., 2001; Marshall et al., 2005; Mollica et al., 1993; Mollica et al., 1998b; Steel et al., 2002). For example, Steel et al. (2002) reported that those exposed to events in three or more trauma categories had an eight-fold increase in risk of mental health problems compared to those with no exposure. Mollica et al. (1999) identified a significant relationship between cumulative trauma and disability whilst two studies reported a relationship between cumulative trauma and a reduction in social functioning (Cardozo et al., 2000; Lopes Cardozo et al., 2004). However, one study (Cardozoa et al., 2004) did not observe a relationship between cumulative trauma and decreased social functioning.

The relationships between specific traumas and mental health problems were investigated by a small number of the studies. De Jong et al. (2001) reported that torture was observed to be a significant predictor of mental health problems in three of the four countries studied. Murder of family or friends, forced separation from family and exposure to harassment or violence were associated with increases in mental health symptoms or a decrease in social functioning (Cardozo et al., 2000; Cardozoa et al., 2004). These findings support other studies (e.g. Holtz, 1998; Mollica et al., 1998a; Steel, Silove, Bird, McGorry, & Mohan, 1999) which have shown the importance of torture or other threats to life as specific risk factors for mental health problems in refugee populations. Other factors reported to be related

to mental health problems, reduced social functioning or disability included a lack of food, older age, being female, having a chronic health complaint, previous psychiatric history, low educational attainment, unemployment and family separation.

Limitations

The studies reviewed above were mostly methodologically rigorous large random population surveys, although some limitations affected the studies. For studies conducted in developing countries, sampling limitations exist such as limited census data from which to sample and the use of a household sampling methodology, where day-time interviewing may have biased the sample towards those with the greatest impairments (e.g. Cardozo et al., 2000). A further limitation is the use of self-report questionnaires, which may have inflated the rates of problems across the studies. This was shown by Turner et al. (2003) who investigated the correspondence between the self-report measure of PTSD used in the study and diagnosis by a clinician. Diagnosis by interview yielded a rate of PTSD approximately 15% lower than that revealed by the self-report questionnaires.

Further limitations included the range of different measures used to assess both trauma and mental health problems, although many studies used similar measures such as the HTQ and HSCL-25 which have shown good internal consistency and have been widely used in different countries and settings

(Mollica et al., 2004). However, it is arguable whether a trauma checklist can ever fully account for the experiences of victims of human rights abuses. Cross-cultural differences such as the applicability of diagnoses to different cultures and the lack of normative data for the populations considered may have further limited the findings. However, because of the limited normative data available for non-western populations for most mental health questionnaires, it is difficult to envision a different situation in any study. The studies nevertheless are well-designed and possibly the most methodologically sound achievable, considering the difficulties that exist in this area of research.

Summary

The studies reviewed above represent well-designed, large sample studies which report markedly different rates of mental health problems and trauma exposure. The studies showed a consistent link between exposure to trauma and an increase in mental health problems, with some evidence of a decline in social functioning and evidence of the long-term impact of these traumas. The studies reported that other demographic factors, such as older age or being female, were related to an increase in psychopathology or a decline in social functioning.

There remain however some unanswered questions. The link between trauma, psychopathology and reduced functioning is unclear with the possibility that despite high rates of trauma and elevated symptom rates,

functioning may be less affected, suggesting the need to further investigate these relationships. Other areas for further research include the long-term impact of trauma on mental health problems and risk and resilience factors that may predict psychopathology.

Criticisms of the psychiatric approach

Despite these studies showing consistently high rates of PTSD and other mental health problems, some critics have cautioned against psychiatric research with refugees. They argue against the presumption that PTSD is a universal reaction to trauma and suggest that the Eurocentric biomedical model of mental health provides an incomplete account of the experiences of populations with very different cultural heritages. For this section of the review, papers that reflected the main criticisms of the psychiatric approach were identified, primarily from other literature. A total of nine papers were reviewed.

Summerfield (1999, 2001, 2002) argues that PTSD as a diagnostic category has become an ever-increasing concept through which to view reactions to disturbing events, leading to the incorrect assumption that PTSD is a universal reaction to trauma. He remarks that prior to the advent of the trauma model, reactions to extreme political events were framed within political or cultural understandings with little mention of mental health. Summerfield (1999, 2001, 2002) argues that this adoption of a psychiatric prism through which to view reactions to violence, torture and persecution

medicalises the suffering experienced and removes it from the socio-political context in which it occurs. He suggests that the use of western psychiatric categories has led to the distress caused by war being objectified, and argues that for the majority of refugees PTSD is a pseudo-condition. He contends that a diagnosis of PTSD does not predict a reduced capacity to survive and suggests that the psychiatric model inappropriately places the cause and solution of distress within the individual and away from the social context in which it occurs.

Bracken and colleagues (Bracken, 1998, 2002; Bracken, Giller, & Summerfield, 1995) offer a similar criticism arguing that psychiatry is rooted in a western conception of self as an individualistic construct. They argue that this makes psychiatry less applicable to cultures where the self is conceived of in relation to other constructs such as social or spiritual dimensions. They further suggest that the application of the psychiatric model to other cultures should be made with caution and with reference to the wider social, cultural and political sphere.

Eisenbruch (1991, 1992) suggests that using categories such as PTSD or Major Depressive Disorder to understand distress in other cultures leads to a category fallacy - where a category has been constructed to yield a homogenous group of patients (Kleinman, 1977, cited in Eisenbruch, 1991) - and therefore does not present an accurate account of refugee distress and experience. Instead, the categorisation of symptoms means that only a small

fraction of the total reaction to war and suffering is understood and explored. Eisenbruch (1991, 1992) proposes a widening of concepts beyond psychiatric categories to include the idea of cultural bereavement. This involves mapping the distress of the refugee to include an understanding of personal meaning, cultural expressions and interpretations of distress, as well as cultural strategies for survival. Finally he also suggests that this provides a richer understanding of the distress of refugees.

The above criticisms present a powerful attack on the uncritical export of the western model of mental health and trauma to other cultures, suggesting that the model provides a simplistic, limited and very narrow account of reactions to war and persecution. They argue that categorising distress as either depression or PTSD is artificial and may not accurately reflect the distress experienced by refugees. The criticisms rightly suggest the need for a broader understanding of the reactions to war and human rights abuses beyond the narrow view of the psychiatric classification system and propose that symptoms categorised as PTSD and depression need to be understood within a framework which accounts for cultural and individual understandings and the ongoing impact of socio-political events.

Summerfield's (1999, 2001, 2002) claim that the western psychiatric model exaggerates rates of mental health problems and does not represent an objective decline in functioning has some support from studies that have shown maintained functioning despite high rates of mental health problems

(e.g. Mollica et al., 1993) but is inconsistent with evidence that has shown a relationship between exposure to trauma, mental health problems and reduced functioning (e.g. Cardozo et al., 2000; Lopes Cardozo et al., 2004; Mollica et al., 1999). Whilst these criticisms do not refute the body of evidence provided by mental health research, they do suggest the need for a broadening of perspectives when assessing the wellbeing of refugees, rather than the assumption that problems can be understood using a purely biomedical framework.

Silove (2000) outlines a conceptual model which may provide a useful alternative perspective by accounting for the multiple impacts and complex meanings of war and human rights violations on individuals and communities. The model consists of five systems which are hypothesised to aid adaptation and survival and are threatened by war and human rights abuses. The systems are: "personal safety", "attachment and bond maintenance", "identity and role functioning", "justice" and "existential meaning". The model views adaptation and survival as an intrinsic part of all human experience which means that the model:

> Both in its broadest sense and when applied to diverse incidents, sits across both the Western model of psychological trauma, and those understandings of experiences relevant to other contexts and cultures (Silove, 2000, p.346).

The model is inclusive and flexible and allows for the understanding of the effects of human rights abuses within a perspective which brings together both psychiatric and systemic factors. A further benefit of this model is that it can be applied to both research and clinical endeavours.

Mental health problems in the post-migratory environment

This section reviews studies conducted with refugee populations in countries of exile, which have investigated the relationship between mental health problems and a greater range of social and contextual factors than the epidemiological studies reviewed above. For this section searches were made using Medline and Psychinfo from 1980 onwards using the terms "refugees or asylum seekers", "mental disorders, emotional-trauma and posttraumatic stress disorder" and terms relating to the post-migration situation including "risk factors, post-migratory factors, post-displacement factors". There is a limited literature on this topic so all studies regardless of country or methodology were included in the review. A total of 23 studies were reviewed, six of which directly compared the relationship of both trauma and post migration factors to mental health problems. The remaining 17 reported the relationship between various post-migration factors and mental health problems. The section begins with a review of literature that has assessed the relative contribution of post-migratory compared to trauma factors followed by a consideration of the factors found to be related to an increased likelihood of mental health problems. General conclusions are then

presented.

Trauma compared to other factors

A number of studies have suggested that post-migration factors have a stronger relationship with some mental health problems than exposure to trauma. Laban, Gernaat, Komproe, Schreuders and de Jong, (2004) compared the wellbeing of two groups of Iraqi asylum seekers who had been resident in the Netherlands for under six months or over two years. They reported that for psychopathology, the odds ratio for a long asylum procedure was approaching double that of exposure to pre-flight trauma. Lie (2002) reported that post-migration events such as a lack of social contact and unemployment exerted a stronger influence on mental health problems than pre-migration trauma at three year follow up with a convenience sample of refugees in Norway. Gorst-Unsworth and Goldenberg (1998) investigated the impact of social factors on the mental wellbeing of Iraqi refugees in London. A number of psychosocial factors (e.g., affective support, separation from children, low number of activities) were found to be significantly associated with overall psychological morbidity, with no association found between trauma factors and morbidity. Low affective support (19%) and a lack of contact with a political organisation in exile (6%) accounted for 25% of the symptom variance. There were apparent differences between disorders, with PTSD being associated with pre-flight trauma, whilst depressive reactions were associated only with social support variables.

Other studies have suggested that trauma continues to be the most significant risk factor, even when post-migration factors are considered. Fenta, Hyman and Noh (2004) investigated the impact of pre and post-migratory factors on depression in a sample of Ethiopian immigrants and refugees in Toronto, Canada. With regards to depression, the authors reported that trauma exposure had an odds ratio greater than twice the ratio for post-migration problems. Steel, et al. (2002) supported this finding reporting that exposure to traumatic events was the most important predictor of mental health problems with odds ratios generally higher than problems such as living alone, poor English proficiency and being unemployed.

This discrepancy in findings may partly be explained by the variation between the studies in terms of sample characteristics, variables assessed, different experiences of conflict, cultural differences and differences in the post-migration environment. Nevertheless, the studies reviewed indicate that aspects of the post-migratory environment may increase the risk of mental health problems for refugees. However, the mechanism of the risk and the relationship between exposure to trauma, post-migratory problems and mental health problems is unclear. Using data from a study of Tamil refugees, asylum seekers and immigrants in Australia, Steel et al. (1999) reported that path analysis showed that pre-migration detention and abuse exerted the greatest unique direct effects on posttraumatic symptoms, whilst post-migratory experiences exerted strong unique direct effects and mediated some of the indirect premigration experiences (such as exposure to

conflict). This supports the notion of the importance of post-migratory factors and suggests an interaction between post-migratory problems and the type of traumas experienced.

Post-migration problems

Studies have identified a range of factors which appear related to poor mental health outcomes in refugees. Some factors such as low socioeconomic status and reduced social support reflect the mental health risk factors identified in research with non refugee populations (e.g. Andrade et al., 2003; Brissette, Cohen, & Seeman, 2000), whilst some asylum related issues are unique to refugee populations. This section presents the main groups of factors suggested to have a detrimental impact on the mental health of refugees.

Asylum issues

Several studies have shown that factors related to the process of getting asylum including a long asylum application process (Laban et al., 2004; Silove et al., 1997; Steel et al., 1999), detention for immigration purposes (Ichikawa, Nakahara, & Wakai, 2006b; Steel et al., 2006), and the granting of limited temporary protection (Steel et al., 2006) may be related to an increased likelihood of mental health problems. The mechanism by which these factors operate is unclear. For example, the effect may be a result of mediating factors, such as the anxiety and insecurity of a lengthy asylum process, or restricted rights to work or benefits. Further research is required particularly to look at the experiences of different groups of asylum seekers

including those in the appeal system, those in detention and asylum seekers whose applications have failed.

Racism and discrimination

Refugees are likely to be affected by wider societal attitudes towards minority groups in the country of asylum. They may further be affected by negative political or media attitudes towards them. Only a limited number of studies have investigated the effect of racism and discrimination on refugees. Some studies (e.g. Pernice & Brook, 1996; Sundquist & Johansson, 1996) have found support for the effect of racism and discrimination whilst others have reported only limited support (e.g. Fenta et al., 2004; Silove et al., 1997). Whilst these studies suggest that discriminatory attitudes may have a negative impact on the wellbeing of refugees, further research is required to understand the prevalence and effect of this.

Economic related factors

Several studies have reported that restricted economic opportunity or poor socioeconomic living conditions are risk factors for the development of mental health problems (Chung & Bemak, 1996; Laban, Gernaat, Komproe, van der Tweel, & De Jong, 2005; Porter & Haslam, 2005). Whilst other studies have reported the protective impact of employment in guarding against mental health problems (Lie, 2002; Lie, Sveaass, & Eilertsen, 2004). These findings correspond with research from non-refugee populations which has shown that lower socioeconomic status is related to an increased risk of mental health problems (e.g. Andrade et al., 2003).

Social support factors

Research with non-refugee populations has shown social support to be a consistent predictor of different health and mental health outcomes (Brissette et al., 2000), and has been shown to protect against PTSD in research with non-refugee populations (Brewin, Andrews, & Valentine, 2000). In studies of refugees, social support has been investigated using a number of direct and proxy measures. For example, studies have shown that various family related factors, such as access to family, provides a protective function (Lie et al., 2004), whilst enforced separation and an inability to provide support to family members in another country is related to an increase in mental health problems (Hauff & Vaglum, 1995; Laban et al., 2005; Lie, 2002).

Other studies directly assessing social support have shown that it is an important predictor variable of PTSD and depression in refugees. Studies have varied in their approach to the measurement of social support, with some assessing the effect of not having close friends (Hauff & Vaglum, 1995; Pernice & Brook, 1996), whilst others have used validated measures of perceived and received social support and found increased support to be related to decreased mental health problems (Cheung & Spears, 1995; Ghazinour, Richter, & Eisemann, 2004; Hauff & Vaglum, 1995; Pernice & Brook, 1996; Takeda, 2000). In the only UK study, Gorst-Unsworth and Goldenberg (1998) reported that low affective support was a stronger predictor of overall psychopathology and depression than exposure to trauma, whilst for PTSD the relationship appeared weaker, but remained

significant. The effect of social support has also been documented in post-conflict countries, such as the former Yugoslavia (Jovanovic, Aleksandric, Dunjic, & Todorovic, 2004).

Limitations

Methodological limitations such as reduced sample sizes, differences in sample composition, a small number of factors investigated, and differences in definitions of post-migration problems complicate interpretation and comparison. The most rigorous studies are those that have compared the relative contribution of trauma and a range of other factors (e.g. Fenta et al., 2004; Gorst-Unsworth & Goldenberg, 1998; Laban et al., 2004; Lie, 2002; Steel et al., 2002), which have all shown a relationship between post-migratory factors and psychopathology with some disparity as to the strength of the association.

Conclusion

This section has highlighted the relationship between post-migratory factors and an increased risk of mental health problems. Whilst the impact of individual risk variables has been observed, the causal mechanisms and interactions remain to be established, with there being a need for more research on the specific risk and resilience factors that have an impact on refugee mental health (Rasco & Miller, 2004). A clearer understanding of the relative impact of different factors can help shape clinical interventions and government policies to enhance the psychological wellbeing and quality of

life of refugees.

The evidence to date supports the concerns raised by refugee organisations and advocacy groups about the impact recent changes in UK asylum law, such as the provision of temporary protection and the withdrawal of support for some asylum seeker groups, may have on wellbeing (Hull & Boomla, 2006; ICAR, 2006; Refugee Council, 2005). Asylum policy makers should take into account aspects of the asylum process shown to have a detrimental effect. These include, detention, temporary protection and limitation of support, the restriction on employment for asylum seekers, and the loss of social support that may result from dispersal to different areas of the UK where friends and relatives may not be present. A consideration of these factors within UK asylum policy would assist the resettlement process of refugees and reduce their risk of developing mental health problems.

What interventions help refugees?

The extent of upheaval, abuse and loss that refugees may experience, such as threats to the safety of one's family or self, torture, loss of family members and various post-migratory problems, suggests the need for interventions that are in themselves broad enough to address these multiple problems. Suggested interventions have been as diverse as to include individual therapy, family tracing services, increased community and social support, legal representation and financial and employment opportunities (e.g. Gorst-Unsworth & Turner, 1993; Mollica, Cui, McInnes, & Massagli, 2002; Nicholl &

Thompson, 2004). However, the majority of interventions for refugees have followed the western model of clinic-based services treating psychiatric disorders, despite limited empirical research on the effectiveness of such approaches with refugees (Miller & Rasco, 2004).

This section will review the literature on interventions employed with refugees. Searches were made in Psychinfo and Medline for articles with adult populations since 1980 using terms including "refugees or asylum seekers" and "intervention or therapy". The literature can be divided into two main sections, traditional clinical approaches, and non-clinical approaches where a wider ecological or community based model has been employed. Twelve papers were reviewed. Two papers evaluated non-clinical interventions, four papers evaluated clinical interventions and the remaining six addressed theoretical issues. This section reviews the two areas separately before drawing conclusions about the provision of interventions.

Non-clinical approaches

Advocates for the use of non-clinical forms of helping with refugees, suggest that western models and therapy are limited because of alternative patterns of help seeking behaviour, differences in the conceptualisation of mental health problems and cultural differences about whether interventions should focus on the individual or wider system (Bemak & Chung, 2002; Miller & Rasco, 2004). It has been suggested that even when therapeutic services are available, refugees do not necessarily seek treatment (Miller & Rasco,

2004), with a variety of reasons being proposed that may explain this, including language and communication problems and underfunded or hard to reach services (Bemak & Chung, 2002; Miller & Rasco, 2004). However, it has been suggested that the primary reasons for the limited use of services are cultural differences regarding the approach to restoring wellbeing, with alternative forms of support provided by traditional healers and community networks being more frequently employed (Bemak & Chung, 2002; Miller & Rasco, 2004).

Some authors have argued that cultural differences in the conceptualisation of problems limits the applicability of western style services to refugees (e.g. Bemak & Chung, 2002; Bracken et al., 1995; Miller & Rasco, 2004; Richman, 1998). They suggest that the individual and medical emphasis of the western psychiatric model is substantially different to the religious, spiritual and community based models of health and illness that exist in a variety of non-western cultures (Bemak & Chung, 2002; Miller & Rasco, 2004; van de Put & Eisenbruch, 2004). It is argued that these factors suggest the need to adapt clinical services to make them more accessible and acceptable to diverse populations (Bemak & Chung, 2002; Miller & Rasco, 2004).

Service frameworks offered as alternatives to the traditional western model differ in their focus but all suggest services be adapted to local needs. For example, Miller and Rasco (2004) advocate for services built around ecological principles such as a focus on the environment as well as the

individual, adaptation of services for local beliefs, integration of services into the community setting and capacity building of community members. Bemak and Chung (2002) suggest a multi stage model of intervention which - whilst using western conceptualisations of therapy and mental health - combines these with cultural empowerment approaches and indigenous healing systems. These principles are consistent with the empirical research reviewed above, which documents the protective impact of social support as well as evidence that despite using western methods of healing, some refugee groups continue to use a range of traditional methods (Chung & Lin, 1994).

Despite calls for adapted services, there has been limited empirical research on the subject. The few studies that have provided a quantitative evaluation of a community or ecologically principled service with refugees have shown promising results. For example, Weine et al. (2003) reported a community level intervention for refugee families. The initiative provided participants with six sessions of a multi-family group meeting as well as home visits and sessions that addressed issues related to adaptation in the host country. The project had contact with 61 families. Uncontrolled analysis of results at post-intervention suggested that involvement in the initiative was associated with greater social support and psychiatric service use.

Goodkind, Hang and Yang (2004) reported the results of a pilot project which used undergraduate students as helpers for Hmong refugees. The students

worked with refugees in community settings, providing advocacy workshops and skills transfer as well as individual cultural exchange and discussion. The authors reported qualitative and quantitative results based on 28 families suggesting that English proficiency and quality of life significantly increased during the intervention, and distress significantly declined. The authors concluded that overall positive effects were noted for the intervention, but not all effects were maintained when the intervention ceased.

Whilst these studies indicated positive effects, due to methodological difficulties such as small sample sizes and uncontrolled evaluation methodologies, it is not possible to conclude whether community or ecological approaches are efficacious for refugee populations. Hubbard and Miller (2004) suggested a similar conclusion noting that several ecological and community based approaches they reviewed did not offer formal evaluation results.

Clinical approaches

Substantial debate exists surrounding the issue of offering psychological therapies to refugees. At one end of the continuum are commentators who suggest there is little value to be gained from this endeavour, whilst a more moderate view is that psychotherapy has a place in the treatment of refugees in the context of a broader treatment intervention (Bemak & Chung, 2002; Miller & Rasco, 2004). Research in the area is limited, but there is some empirical evidence which suggests that psychological therapies can be of

benefit.

In an uncontrolled study, Weine, Kulenovic, Pavkovic and Gibbons (1998) report on the use of "testimony psychotherapy" - a form of therapy that formally documents the testimonial of the refugee client - with 20 refugees resident in the United States. Participants received a mean of six sessions of therapy. There were decreases in rates of PTSD diagnosis, symptom severity and depressive symptomatology and an increase in overall functioning. Follow up at two and six months showed further decreases.

Neuner, Schauer, Klaschik, Karunakara and Elbert (2004) provided a more robust investigation of the effects of a related therapy. They report on the use of narrative exposure therapy (NET) - a therapy that combines exposure therapy and testimony therapy – with residents in an African refugee settlement (n=43). Participants received either four session of NET (n=17), four sessions of supportive counselling (n=14) or one session of psychoeducation (n=12). At one-year post treatment 29% of NET participants met PTSD criteria compared to 79% and 80% of the supportive counselling and psychoeducation groups respectively, representing a clinically significant effect. However, despite the effects on PTSD, there was no significant difference between the groups in the proportions of participants reaching caseness on a measure of overall symptomatology.

With regards to Cognitive Behavioural Therapy (CBT) - a therapy that has

proven efficacy with a wide range of disorders - Paunovic and Ost (2001) conducted a small scale study where 16 participants were randomly allocated to either 20 sessions of exposure or CBT. Improvement across PTSD and other symptomatology (e.g., depression and anxiety) and quality of life were maintained at 6-month follow up. There were no differences between the therapies, with symptom reductions of between 43-60% observed depending on the group and symptom measure concerned.

In the best designed study to date, Hinton, Chhean, Pich, Safren, Hofmann and Pollack (2005) reported a randomised control trial of CBT which had been culturally adapted for Cambodian refugees living in the United States. The design was a wait list control trial with 20 participants randomly allocated to each group. Sessions lasted 12 weeks and were all conducted by the first author who spoke fluent Khmer. Results showed that patients improved across all measures assessing PTSD diagnosis and severity, anxiety symptoms and depression. Results indicated large effect sizes for the immediate versus delayed treatment groups, reflecting treatment effects found in CBT studies with non-refugee populations (Hinton et al., 2005). One major strength of the study was the use of a culturally sensitive adaptation of CBT which employed techniques such as culturally sensitive visualisations, mindfulness relaxation practises and a focus on culturally relevant symptoms (e.g., concern about the rupturing of the blood vessels in the neck during a panic attack) in addition to more traditional aspects of CBT for PTSD.

Unfortunately, most of the studies reviewed above had various methodological flaws including small treatment group sizes, non-random designs and in the majority, a lack of a wait list or treatment control. Furthermore, there was limited control of other confounding variables. The most promising studies were Neuner et al. (2004) and Hinton et al. (2005) which provided a greater degree of methodological rigour. The study by Hinton and colleagues is particularly promising because of the very large effect sizes reported and the use of randomisation to treatment or a wait list control.

Conclusion

Research investigating the efficacy of interventions for refugees is still in its early stages. Community based and ecological approaches are theoretically sound, but there is little existing empirical evidence on their efficacy. Evidence for the effectiveness of paraprofessional, befriending and informal support interventions exist in the non-refugee literature (Barker & Pistrang, 2002; Bradshaw & Haddock, 1998; Harris, Brown, & Robinson, 1999), which would seem to offer some support for providing these interventions in refugee settings, but further research is clearly needed. Traditional studies of therapeutic effect, which are by their very nature easier to control and evaluate, have shown some promising effects, but again, further research is required.

Models of service delivery combining aspects of psychotherapy within a

broader framework, which includes a human rights perspective, awareness of the post-migration situation and a range of social and psychological interventions, may provide the most promising approach. This reflects clinical observations and guidance from the UK's National Institute for Clinical Excellence which have suggested the use of a phased model of intervention when working with refugees (Blackburn, Herlihy, & Turner, 2003; Gorman, 2001; National Institute for Clinical Excellence, 2005). Initially described by Herman (1992, cited in Gorman, 2001) as a way of working with women experiencing domestic violence, the phased model comprises of three phases of treatment (Gorman, 2001; National Institute for Clinical Excellence, 2005).

Phase one concerns the establishment of safety and trust, including the development of a therapeutic relationship and addressing issues such as asylum application, housing, family separation and psychoeducation. It is noted that the establishment of security may be difficult for people without legal status to remain because of the very real threat of being deported back to a situation of danger or persecution. Once trust and security have been established trauma focused interventions aimed at reintegrating and processing the trauma memory can be employed. Phase three deals with the process of integration into society, with therapeutic concerns focused more on employment opportunities and future goals. The model provides a useful framework for developing interventions which may utilise partnership working between clinical, non-clinical and community resources to address the broad

ranging problems experienced by refugees.

Overall conclusions

This literature review sought to examine the trauma experiences of refugees, rates of mental health problems and the factors related to increased distress and difficulties. Whilst critics of the application of the psychiatric paradigm to refugees suggest that the results of prevalence studies are substantially limited, there appears sufficient evidence of increased levels of distress and reduced functioning in refugee populations. However, the evidence points to the importance of a range of factors in determining wellbeing rather than a straightforward linear relationship between exposure to trauma and mental health problems, with post-migratory factors in developed countries exerting a strong influence on wellbeing. The research on interventions with refugees is too limited to draw any firm conclusions; however, initial results indicate that community and ecological approaches as well as psychological therapy may be of benefit.

The review suggests that future research should employ a range of methodologies and constructs when investigating the refugee experience, looking at the impact of a broader range of factors on mental health, functioning and quality of life. Qualitative approaches can supplement quantitative endeavours by providing detailed explorations of the experiences and lives of refugees looking at what aspects may have the greatest effect on wellbeing.

The review illustrates that refugees may be at increased risk of developing mental health problems in the post-migratory environment, which indicates the need for services to address these problems. There is a general consensus that services should be holistic and address the broader set of problems refugees may experience, as these problems appear to have a considerable impact on mental health, over and above the impact of trauma which is commonly addressed by services.

Whilst there is a need for greater research on risk and protective factors, the evidence to date should encourage policy makers in both national and local government to develop policy and law that enhances rather than impairs the wellbeing of people claiming asylum in the UK. Some examples may include restricting the use of practices such as detention, providing indefinite leave to remain and developing interventions that enhance the availability of social support, employment and other activities.

References

Andrade, L., Caraveo Anduaga, J. J., Berglund, P., Bijl, R. V., De Graaf, R., Vollebergh, W., et al. (2003). The epidemiology of major depressive episodes: Results from the International Consortium of Psychiatric Epidemiology (ICPE) Surveys. *International Journal of Methods in Psychiatric Research, 12*, 3-21.

Babor, T., de la Fuente, J., Saunders, J., & Grant, M. (1992). *AUDIT: The Alcohol Use Disorders Identification Test: guidelines for use in primary health care*. Geneva, Switzerland: WHO.

Barker, C., & Pistrang, N. (2002). Psychotherapy and social support: Integrating research on psychological helping. *Clinical Psychology Review, 22*, 361-379.

Beck, A. (1987). *Beck Anxiety Inventory*. New York: Psychological Corporation.

Beck, A. (1996). *Beck Depression Inventory*. New York: Psychological Corporation.

Bemak, F., & Chung, R. C. Y. (2002). Refugees and terrorism: Cultural innovations in clinical practice. In C. E. Stout (Ed.), *The psychology of terrorism: Clinical aspects and responses, Vol. II.* Westport, US: Praeger Publishers/Greenwood Publishing Group.

Blackburn, P., Herlihy, J., & Turner, S. (2003). Pre-meeting Institute: A phased clinical intervention for refugees, *Abstracts of the VIII European conference on Traumatic Stress*. Berlin.

Bracken, P. (1998). Hidden agendas: Deconstructing Post Traumatic Stress Disorder. In P. J. Bracken & C. Petty (Eds.), *Rethinking the trauma of war*. London: Free Association Books.

Bracken, P. (2002). Cultural syndromes and cognitive psychology. *Transcultural Psychiatry, 39*, 214-219.

Bracken, P., Giller, J. E., & Summerfield, D. (1995). Psychological responses to war and atrocity: The limitations of current concepts. *Social Science*

and Medicine, 40, 1073-1082.

Bradshaw, T., & Haddock, G. (1998). Is befriending by trained volunteers of value to people suffering from long-term mental illness? *Journal of Advanced Nursing, 27*, 713-720.

Breslau, N., Kessler, R. C., Chilcoat, H. D., Schultz, L. R., Davis, G. C., & Andreski, P. (1998). Trauma and posttraumatic stress disorder in the community: The 1996 Detroit Area Survey of Trauma. *Archives of General Psychiatry, 55*, 626-632.

Brewin, C. R., Andrews, B., & Valentine, J. D. (2000). Meta-analysis of risk factors for posttraumatic stress disorder in trauma-exposed adults. *Journal of Consulting and Clinical Psychology, 68*, 748-766.

Brissette, I., Cohen, S., & Seeman, T. E. (2000). Measuring Social Integration and Social Networks. In S. Cohen, L. G. Underwood & B. H. Gottlieb (Eds.), *Social Support Measurement And Intervention: A guide for health and social scientists*. Oxford: Oxford University Press.

Cardozo, B. L., Vergara, A., Agani, F., & Gotway, C. A. (2000). Mental health, social functioning, and attitudes of Kosovar Albanians following the war in Kosovo. *JAMA, 284*, 569-577.

Cardozoa, B. L., Talley, L., Burton, A., & Crawford, C. (2004). Karenni refugees living in Thai-Burmese border camps: Traumatic experiences, mental health outcomes, and social functioning. *Social Science and Medicine, 58*, 2637-2644.

Cheung, P., & Spears, G. (1995). Psychiatric morbidity among New Zealand Cambodians: the role of psychosocial factors. *Social Psychiatry &*

Psychiatric Epidemiology, 30, 92-97.

Chung, R. C., & Bemak, F. (1996). The effects of welfare status on psychological distress among Southeast Asian refugees. *Journal of Nervous and Mental Disease, 184*, 346-353.

Chung, R. C. Y., & Lin, K. M. (1994). Help-seeking behavior among Southeast Asian refugees. *Journal of Community Psychology, 22*, 109-120.

de Jong, J. T. V. M., Komproe, I. H., Van Ommeren, M., El Masri, M., Araya, M., Khaled, N., et al. (2001). Lifetime events and posttraumatic stress disorder in 4 post-conflict settings. *JAMA: Journal of the American Medical Association, 286*, 555-562.

Eisenbruch, M. (1991). From post-traumatic stress disorder to cultural bereavement: Diagnosis of Southeast Asian refugees. *Social Science and Medicine, 33*, 673-680.

Eisenbruch, M. (1992). Toward a culturally sensitive DSM: Cultural bereavement in Cambodian refugees and the traditional healer as taxonomist. *Journal of Nervous and Mental Disease, 180*, 8-10.

Fenta, H., Hyman, I., & Noh, S. (2004). Determinants of Depression Among Ethiopian Immigrants and Refugees in Toronto. *Journal of Nervous and Mental Disease, 192*, 363-372.

Foa, E. B., Cashman, L., Jaycox, L., & Perry, K. (1997). The validation of a self-report measure of posttraumatic stress disorder: The Posttraumatic Diagnostic Scale. *Psychological Assessment, 9*, 445-451.

Gandek, B., Ware, J. J., Aaronson, N., Apolone, G., Bjorner, J., Brazier, J., et al. (1998). Cross-validation of item selection and scoring for the SF-12 Health Survey in nine countries: results from the IQOLA project. International quality of life assessment. *Journal of Clinical Epidemiology, 51*, 1171-1178.

Ghazinour, M., Richter, J., & Eisemann, M. (2004). Quality of life among Iranian refugees resettled in Sweden. *Journal of Immigrant Health, 6*, 71-81.

Goldberg, D. P., & Hillier, V. F. (1979). A scaled version of the General Health Questionnaire. *Psychological Medicine, 9*, 139-145.

Goodkind, J., Hang, P., & Yang, M. (2004). Hmong Refugees in the United States: A Community-based advocacy and learning intervention. In K. E. Miller & L. M. Rasco (Eds.), *The mental health of refugees: Ecological approaches to healing and adaptation*. New Jersey, US: Lawrence Erlbaum Associates Publishers.

Gorman, W. (2001). Refugee survivors of torture: Trauma and treatment. *Professional Psychology: Research and Practice, 32*, 443-451.

Gorst-Unsworth, C., & Goldenberg, E. (1998). Psychological sequelae of torture and organised violence suffered by refugees from Iraq: Trauma-related factors compared with social factors in exile. *British Journal of Psychiatry, 172*, 90-94.

Gorst-Unsworth, C., & Turner, S. W. (1993). Psychological sequelae of torture. In J. P. Wilson & B. Raphael (Eds.), *International Handbook of Traumatic Stress Syndromes*. New York: Plenum Press.

Harris, T., Brown, G. W., & Robinson, R. (1999). Befriending as an intervention for chronic depression among women in an inner city: 1: Randomised controlled trial. *British Journal of Psychiatry, 174*, 219-224.

Hauff, E., & Vaglum, P. (1995). Organised violence and the stress of exile. Predictors of mental health in a community cohort of Vietnamese refugees three years after resettlement. *British Journal of Psychiatry, 166*, 360-367.

Hinton, D. E., Chhean, D., Pich, V., Safren, S. A., Hofmann, S. G., & Pollack, M. H. (2005). A randomized controlled trial of Cognitive-Behavior Therapy for Cambodian refugees with treatment-resistant PTSD and panic attacks: a cross-over design. *Journal of Traumatic Stress, 18*, 617-629.

Holtz, T. H. (1998). Refugee trauma versus torture trauma: A retrospective controlled cohort study of Tibetan refugees. *Journal of Nervous and Mental Disease, 186*, 24-34.

Home Office. (2005). NASS policy bulletin 17. London: Home Office. Retrieved 01/12/06 from http://www.ind.homeoffice.gov.uk/documents/travel/.

Home Office. (2006a). *Asylum statistics United Kingdom 2005*. London: Home Office Research Development and Statistics Directorate (Available: www.homeoffice.gov.uk/rds).

Home Office. (2006b). *Asylum support - frequently asked questions*. Croydon: IND. Retrieved 20/12/06 from

http://www.ind.homeoffice.gov.uk/applying/asylumsupport/faqs.

Hubbard, J., & Miller, K. E. (2004). Evaluating Ecological Mental Health Interventions in Refugee Communities. In K. E. Miller & L. M. Rasco (Eds.), *The mental health of refugees: Ecological approaches to healing and adaptation*. Mahwah, US: Lawrence Erlbaum Associates Publishers.

Hull, S. A., & Boomla, K. (2006). Primary care for refugees and asylum seekers. *BMJ, 332*, 62-63.

Information Centre for Asylum and Refugees. (2006). *ICAR Briefing May 2006: Destitution amongst refugees and asylum seekers in the UK.* Available: www.icar.org.uk.

Ichikawa, M., Nakahara, S., & Wakai, S. (2006). Effect of post-migration detention on mental health among Afghan asylum seekers in Japan. *Australian and New Zealand Journal of Psychiatry, 40*, 341-346.

Jovanovic, A. A., Aleksandric, B. V., Dunjic, D., & Todorovic, V. S. (2004). Family Hardiness and Social Support as Predictors of Post-traumatic Stress Disorder. *Psychiatry, Psychology and Law, 11*, 263-268.

Keane, T. M., Marshall, A. D., & Taft, C. T. (2006). Posttraumatic stress disorder: Etiology, epidemiology, and treatment outcome. *Annual Review of Clinical Psychology, 2*, 161-197.

Kleinman, A. M. (1977). Depression, somatization and "the new cross-cultural psychiatry. *Social Science and Medicine, 11*, 3-10.

Laban, C. J., Gernaat, H. B., Komproe, I. H., Schreuders, B. A., & de Jong, J. T. (2004). Impact of a long asylum procedure on the prevalence of

psychiatric disorders in Iraqi asylum seekers in The Netherlands. *Journal of Nervous and Mental Disease, 192*, 843-851.

Laban, C. J., Gernaat, H. B., Komproe, I. H., van der Tweel, I., & de Jong, J. T. V. M. (2005). Postmigration living problems and common psychiatric disorders in Iraqi asylum seekers in the Netherlands. *Journal of Nervous and Mental Disease, 193*, 825-832.

Lee, D., & Young, K. (2001). Post-traumatic stress disorder: Diagnostic issues and epidemiology in adult survivors of traumatic events. *International Review of Psychiatry, 13*, 150-158.

Lie, B. (2002). A 3-year follow-up study of psychosocial functioning and general symptoms in settled refugees. *Acta Psychiatrica Scandinavica, 106*, 415-425.

Lie, B., Sveaass, N., & Eilertsen, D. E. (2004). Family, activity, and stress reactions in exile. *Community, Work and Family, 7*, 327-350.

Lopes Cardozo, B., Bilukha, O. O., Gotway Crawford, C. A., Shaikh, I., Wolfe, M. I., Gerber, M. L., et al. (2004). Mental health, social functioning, and disability in Post-war Afghanistan. *JAMA, 292*, 575-584.

Macksoud, M. S. (1992). Assessing war trauma in children: A case study of Lebanese children. *Journal of Refugee Studies, 5*, 1-15.

Marshall, G. N., Schell, T. L., Elliott, M. N., Berthold, S. M., & Chun, C. A. (2005). Mental health of Cambodian refugees 2 decades after resettlement in the United States. *JAMA, 294*, 571-579.

Miller, K. E., & Rasco, L. M. (2004). An Ecological Framework for Addressing

the Mental Health Needs of Refugee Communities. In K. E. Miller & L. M. Rasco (Eds.), *The mental health of refugees: Ecological approaches to healing and adaptation.* New Jersey, US: Lawrence Erlbaum Associates Publishers.

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

Mollica, R. F., Cui, X., McInnes, K., & Massagli, M. P. (2002). Science-based policy for psychosocial interventions in refugee camps: A Cambodian example. *Journal of Nervous and Mental Disease, 190*, 158-166.

Mollica, R. F., Donelan, K., Tor, S., Lavelle, J., Elias, C., Frankel, M., et al. (1993). The effect of trauma and confinement on functional health and mental health status of Cambodians living in Thailand-Cambodia border camps. *JAMA, 270*, 581-586.

Mollica, R. F., McDonald, L. S., Massagli, M. P., & Silove, D. M. (2004). *Measuring trauma, measuring torture - Instructions and guidance on the utilization of the Harvard program in refugee trauma's versions of the Hopkins Symptom Checklist (HSCL-25) & The Harvard Trauma Questionnaire (HTQ).* Cambridge MA: Harvard Program in Refugee Trauma.

Mollica, R. F., McInnes, K., Pham, T., Fawzi, M. C. S., Murphy, E., & Lin, L. (1998a). The dose-effect relationships between torture and psychiatric

symptoms in Vietnamese ex-political detainees and a comparison group. *Journal of Nervous and Mental Disease. Vol, 186*, 543-553.

Mollica, R. F., McInnes, K., Poole, C., & Tor, S. (1998b). Dose-effect relationships of trauma to symptoms of depression and post-traumatic stress disorder among Cambodian survivors of mass violence. *British Journal of Psychiatry, 173*, 482-488.

Mollica, R. F., McInnes, K., Sarajlic, N., Lavelle, J., Sarajlic, I., & Massagli, M. P. (1999). Disability associated with psychiatric comorbidity and health status in Bosnian refugees living in Croatia. *JAMA, 282*, 433-439.

Mollica, R. F., Wyshak, G., de Marneffe, D., Khuon, F., & Lavelle, J. (1987). Indochinese versions of the Hopkins Symptom Checklist-25: A screening instrument for the psychiatric care of refugees. *American Journal of Psychiatry, 144*, 497-500.

Mollica, R. F., Wyshak, G., & Lavelle, J. (1987). The psychosocial impact of war trauma and torture on Southeast Asian refugees. *American Journal of Psychiatry, 144*, 1567-1572.

National Audit Office. (2005). *Returning failed asylum applicants*. London: HSMO. Retrieved 2/12/06 from http://www.nao.org.uk/publications/nao_reports/chronindex.asp?type=vfm.

National Institute for Clinical Excellence. (2005). *The management of PTSD in adults and children in primary and secondary care. National Clinical Practice Guideline Number 26.* London: Gaskell and the British Psychological Society.

Neuner, F., Schauer, M., Klaschik, C., Karunakara, U., & Elbert, T. (2004). A Comparison of Narrative Exposure Therapy, Supportive Counseling, and Psychoeducation for Treating Posttraumatic Stress Disorder in an African Refugee Settlement. *Journal of Consulting and Clinical Psychology, 72*, 579-587.

Nicholl, C., & Thompson, A. (2004). The psychological treatment of Post Traumatic Stress Disorder (PTSD) in adult refugees: A review of the current state of psychological therapies. *Journal of Mental Health (UK), 13*, 351-362.

Paunovic, N., & Ost, L. G. (2001). Cognitive-Behavior Therapy vs Exposure Therapy in the treatment of PTSD in refugees. *Behaviour Research and Therapy, 39*, 1183-1197.

Pernice, R., & Brook, J. (1996). Refugees' and immigrants; mental health: Association of demographic and post-immigration factors. *Journal of Social Psychology, 136*, 511-519.

Phan, T. (1997). *Ethnographic and western based approaches to assessing psychiatric symptoms in Vietnamese (Dissertation)*. Sydney: University of New South Wales.

Porter, M., & Haslam, N. (2005). Predisplacement and Postdisplacement Factors Associated With Mental Health of Refugees and Internally Displaced Persons: A Meta-analysis. *JAMA, 294*, 602-612.

Rasco, L. M., & Miller, K. E. (2004). Innovations, Challenges, and Critical Issues in the Development of Ecological Mental Health Interventions With Refugees. In K. E. Miller & L. M. Rasco (Eds.), *The mental health*

of refugees: Ecological approaches to healing and adaptation. New Jersey, US: Lawrence Erlbaum Associates Publishers.

Refugee Council. (2004). *Applying for Section 4 NASS (hard case) Support*. Retrieved 4/8/06 from www.refugeecouncil.org.uk.

Refugee Council. (2005). *The Government's Five-Year Asylum and Immigration Strategy*. Retrieved 4/8/06 from www.refugeecouncil.org.uk.

Richman, N. (1998). Looking before and after: Refugees and asylum seekers in the West. In P. Bracken & C. Petty (Eds.), *Rethinking the trauma of war*. London: Free Association Books.

Richters, J., & Saltzman, W. (1990). *Survey of Exposure to Community Violence: Self-report version.* Rockville, MD: National Institute of Mental Health.

Silove, D. (1999). The psychosocial effects of torture, mass human rights violations, and refugee trauma: Toward an integrated conceptual framework. *Journal of Nervous and Mental Disease, 187*, 200-207.

Silove, D. (2000). A conceptual framework for mass trauma: Implications for adaptation, intervention and debriefing. In J. P. Wilson & B. Raphael (Eds.), *Psychological Debriefing: Theory, practice and evidence*. New York, US: Cambridge University Press.

Silove, D., Sinnerbrink, I., Field, A., Manicavasagar, V., & Steel, Z. (1997). Anxiety, depression and PTSD in asylum-seekers: Associations with pre-migration trauma and post-migration stressors. *British Journal of Psychiatry, 170*, 351-357.

Steel, Z., Silove, D., Bird, K., McGorry, P., & Mohan, P. (1999). Pathways from war trauma to posttraumatic stress symptoms among Tamil asylum seekers, refugees, and immigrants. *Journal of Traumatic Stress, 12*, 421-435.

Steel, Z., Silove, D., Brooks, R., Momartin, S., Alzuhairi, B., & Susljik, I. (2006). Impact of immigration detention and temporary protection on the mental health of refugees. *British Journal of Psychiatry, 188*, 58-64.

Steel, Z., Silove, D., Phan, T., & Bauman, A. (2002). Long-term effect of psychological trauma on the mental health of Vietnamese refugees resettled in Australia: A population-based study. *Lancet, 360*, 1056-1062.

Stewart, A., Hays, R., & Ware, J. J. (1988). Communication: the MOS Short-Form General Health Survey. *Medical Care, 26*, 724-734.

Summerfield, D. (1999). A critique of seven assumptions behind psychological trauma programmes in war-affected areas. *Social Science and Medicine, 48*, 1449-1462.

Summerfield, D. (2001). The invention of post-traumatic stress disorder and the social usefulness of a psychiatric category. *BMJ, 322*, 95-98.

Summerfield, D. (2002). Effects of war: Moral knowledge, revenge, reconciliation, and medicalised concepts of "recovery". *BMJ, 325*, 1105-1107.

Sundquist, J., & Johansson, S. E. (1996). The influence of exile and repatriation on mental and physical health. A population-based study.

Social Psychiatry & Psychiatric Epidemiology, 31, 21-28.

Takeda, J. (2000). Psychological and economic adaptation of Iraqi male refugees: Implications for social work practice. *Journal of Social Service Research, 26*, 1-21.

Turner, S. W., Bowie, C., Dunn, G., Shapo, L., & Yule, W. (2003). Mental health of Kosovan Albanian refugees in the UK. *British Journal of Psychiatry, 182*, 444-448.

UNHCR. (1992). *Handbook on Procedures and Criteria for Determining Refugee Status Under the 1951 Convention and the 1967 Protocol Relating to the Status of Refugees*. Geneva: UNHCR. Retrieved 14/6/06 from www.unhcr.org.

UNHCR. (2006a). *2005 Global Refugee Trends. Statistical overview of populations of refugees, asylum seekers, internally displaced persons, stateless persons, and other persons of concern to UNHCR*. Geneva: UNHCR. retrieved 14/6/06 from www.unhcr.org.

UNHCR. (2006b). *Asylum Levels and Trends in Industrialised Countries, 2005*. Geneva: UNHCR. Retrieved 14/6/06 from www.unhcr.org.

UNHCR. (2006c). *State of the World's Refugees, Human displacement in the new millennium*. Oxford: Oxford University Press. Retrieved 14/6/06 from www.unhcr.org.

van de Put, W. A., & Eisenbruch, M. (2004). Internally Displaced Cambodians: Healing Trauma in Communities. In K. E. Miller & L. M. Rasco (Eds.), *The Mental Health of Refugees: Ecological approaches to healing and adaptation*. New Jersey, US: Lawrence Erlbaum

Associates Publishers.

Ward, K. (2006). *ICAR Navigation guide: Key issues: UK asylum law and process.* Available: http://www.icar.org.uk/?lid=374.

Ware, J. J., Snow, K., Kosinski, M., & Gandek, B. (1997). *SF-36 Health Survey, manual & interpretation guide. 2nd ed.* Boston, US: The Health Institute, New England Medical Center.

Weine, S. M., Kulenovic, A. D., Pavkovic, I., & Gibbons, R. (1998). Testimony psychotherapy in Bosnian refugees: A pilot study. *American Journal of Psychiatry, 155*, 1720-1726.

Weine, S. M., Raina, D., Zhubi, M., Delesi, M., Huseni, D., Feetham, S., et al. (2003). The TAFES multi-family group intervention for Kosovar refugees: A feasibility study. *Journal of Nervous and Mental Disease, 191*, 100-107.

World Health Organization. (1997). *Composite international diagnostic interview (CIDI), Version 2.1.* Geneva, Switzerland: WHO.

Part 2: Empirical paper

The relationship between pre and post-migration stressors and psychological wellbeing of refugees

Abstract

This study investigated the relationship between pre and post-migratory factors and the psychological wellbeing of refugees. Refugees (n = 41) were recruited mainly from clinical settings. They completed self-report measures of post-migratory factors, psychological wellbeing, self-rated health and social support. Results showed that for both PTSD symptoms and emotional distress, post-migratory problems had a stronger association than number of traumatic events, whilst for self-rated health, number of traumas involving injury, or coercion was the only significant correlate. There was some evidence of the importance of daily activity, economic adversity, uncertainty, family separation and social support in predicting psychopathology. Results are discussed in relation to current policy and interventions concerning refugees and asylum seekers.

Introduction

War and other large-scale human rights abuses can lead to individuals becoming internally displaced or seeking safety in another country. According to estimates from the United Nations High Commission for Refugees (UNHCR), in 2005 there were worldwide approximately 21 million "people of concern" of which, eight million were refugees, 680,000 were

asylum-seekers and 12.5 million were internally displaced, stateless, or of concern for other reasons (UNHCR, 2006a)[2]. However, because of limited systematic data collection in a number of countries, these figures are likely to be an underestimate (UNHCR, 2006a). Approximately one-third of refugees apply for refuge in a developed as opposed to developing country (UNHCR, 2006b, 2006c). In the UK, at the end of 2004, there were an estimated 290,000 refugees resident (UNHCR, 2006c), with 30,840 applications for asylum in 2005 (Home Office, 2006a).

Studies of refugees differ greatly in terms of the population surveyed, measures used, differences in geopolitical events and the extent of human rights abuses. This has led to large variations in results and makes comparison between studies difficult. For example, studies conducted on clinical or convenience samples in western countries are more likely to report inflated rates of problems, whilst epidemiological and large-scale population studies provide the most accurate estimates of psychopathology and tend to report lower rates (Silove, 1999). Despite these variations in reported figures, the evidence base provides some consistencies. Population and epidemiological studies have shown that refugees experience a wide range

---

[2] The term "refugee" refers to someone who meets the criteria enshrined in the 1951 Convention relating to the status of refugees (UNHCR, 1992). To reflect the true meaning of the convention, the term 'refugee' will be used to refer to 'asylum seekers' and 'failed asylum seekers' to reflect the position that someone can be a refugee, despite not being recognised as such by a host country. The distinction with asylum seekers will only be made where necessary.

and high number of traumatic events. Events commonly experienced include, a lack of food, water or shelter, combat situations, forced displacement and being close to death, with studies reporting a mean of between 7 and 15 traumatic events being experienced (Cardozo et al., 2000; Cardozoa et al., 2004; de Jong et al., 2001; Lopes Cardozo et al., 2004; Marshall et al., 2005; Mollica et al., 1993; Mollica et al., 1999; Turner et al., 2003). This is substantially higher than the mean of five traumatic events reported in US studies which may assess for some less severe traumas, such as learning of traumas happening to others or being in a car accident (e.g. Breslau et al., 1998). Torture is reported by as many as 54% of refugee respondents (Marshall et al., 2005), but the rates vary depending on the country in question.

Studies have also consistently shown refugees to be at increased risk of mental health problems with rates of PTSD varying between 10% and 65% (Cardozo et al., 2000; de Jong et al., 2001; Lopes Cardozo et al., 2004; Marshall et al., 2005; Mollica et al., 1998b; Mollica et al., 1999; Turner et al., 2003), and rates of depression between 40% and 68% (Cardozoa et al., 2004; Lopes Cardozo et al., 2004; Marshall et al., 2005; Mollica et al., 1998b; Mollica et al., 1999; Turner et al., 2003). This is in comparison to depression rates of 3% - 15% and PTSD rates of 8% in developed nations (Andrade et al., 2003; Keane et al., 2006). All these studies report a relationship between trauma and mental health problems, which is particularly pronounced for PTSD, but is also apparent for other disorders.

Studies conducted in developed host countries have focused on the additional impact the post-migratory environment may have on refugee mental health. These studies suggest that factors in the post-migratory living environment exert additional influence. For example, a study of two groups of Iraqi asylum seekers who had lived in the Netherlands for less than six months, or for over two years showed that the five clusters of post-migratory problems investigated – family issues, discrimination, asylum procedure, socioeconomic living conditions and socioreligious living conditions- were all associated with an increased likelihood of mental health problems (Laban et al., 2005). The clusters of family issues, asylum procedure and employment had the highest odds ratio for one or more disorders. An earlier study using the same sample established that with the exception of PTSD, post-migration living problems exerted a greater influence on all psychopathology than adverse life events prior to migration (Laban et al., 2004). Similar results were found for a sample of asylum seekers in Australia where pre-migration trauma was associated only with PTSD, with loneliness, boredom, conflict with immigration officials and poverty being associated with anxiety or depression (Silove et al., 1997). A study in the UK of Iraqi asylum seekers showed that low affective support was a stronger predictor of depression than torture was, whilst for PTSD, torture was the most important predictor with low affective support exerting a smaller influence (Gorst-Unsworth & Goldenberg, 1998). In a study of Tamil refugees, asylum seekers and immigrants in Australia, Steel et al. (1999) reported that pre-migration detention and abuse exerted the greatest unique direct effects on posttraumatic symptoms, whilst post-migratory experiences exerted strong

unique direct effects and mediated some of the effect of indirect pre-migration trauma experiences, such as exposure to conflict.

Other studies of diverse groups of refugees in different countries around the world have offered further evidence of the impact of post-migratory problems on mental health. Several studies have shown that factors related to the process of getting asylum, including a long asylum application process (Laban et al., 2004; Silove et al., 1997; Steel et al., 1999), detention for immigration purposes (Ichikawa et al., 2006b; Steel et al., 2006), and the granting of limited temporary protection (Steel et al., 2006), may be related to an increased likelihood of mental health problems. A further relationship has been identified between restricted economic opportunity or poor socioeconomic living conditions and an increased risk of mental health problems (Chung & Bemak, 1996; Laban et al., 2005; Porter & Haslam, 2005), with additional evidence of the protective effect of employment (Bhui et al., 2006; Lie et al., 2004). Social support has been investigated with refugee populations using a number of direct and proxy measures. For example, studies have shown that various familial related factors, such as access to familial relations, provide a protective function (Lie et al., 2004), whilst family separation or a lack of close confidants or friends is related to an increase in mental health problems (Ghazinour et al., 2004; Hauff & Vaglum, 1995; Laban et al., 2005; Lie, 2002; Pernice & Brook, 1996). These findings have been supported by studies employing validated measures of perceived and received social support which have reported that increased support is related to decreased mental health symptomatology (Cheung &

Spears, 1995; Ghazinour et al., 2004; Hauff & Vaglum, 1995; Pernice & Brook, 1996; Takeda, 2000).

Whilst there is mounting evidence highlighting the effect of post-migration risk factors on mental health, there is a need for further research in the area, as several limitations affect the studies, such as small sample sizes, convenience samples and few employing measures validated with the study population. Furthermore, the mechanisms by which risk factors operate and the factors which mediate them are yet to be clearly identified. Nevertheless, the data are consistent in attesting to the impact the post-migratory environment may have on mental health.

Despite refugee organisations and advocacy groups voicing concerns about the impact of UK immigration policy on the wellbeing of refugees, such as the withdrawal of indefinite leave to remain, reduced levels of financial support and dispersal (Hull & Boomla, 2006; ICAR, 2006; Refugee Council, 2005), there has been little empirical research in the UK. Furthermore, to date, no study has investigated the effects of social support as well as asylum related factors and general post-migration adversity.

Aims and hypotheses

The central aim of the present study is to investigate the relationship between several post-migration factors (particularly social support and

asylum related factors) and mental health problems in refugees attending services. The hypotheses are:

1. Pre-migratory trauma experiences and post-migratory problems and other factors (e.g., asylum application status, unemployment, separation from family, social support) will be associated with PTSD symptoms, emotional distress and self-rated health.

2. Social support and other post-migratory factors will account for additional variance in PTSD symptoms, emotional distress and self-rated health when pre-migratory traumatic experiences have been accounted for.

Method

Setting

Participants were recruited from three settings in London between October 2006 and May 2007. The settings included a specialist NHS trauma clinic where the lead researcher was working at the time, an outpatient psychology service and a voluntary refugee support agency.

Power calculations

Two power calculations using R-squared values from studies that had investigated the impact of post-migratory variables on the mental wellbeing of refugees, asylum seekers or immigrants were performed using the computer program PASS (Hintze, 2004). The first calculation was performed using data

from a study of Iraqi asylum seekers in London, UK (Gorst-Unsworth & Goldenberg, 1998), where 25% of the variance in scores on mental health questionnaires was accounted for by the post-migratory factors investigated. The calculation showed that a sample size of 48 achieves 81% power to detect an R-Squared of .25 attributed to 6 independent variables using an F-Test with a significance level (alpha) of .05.

The second calculation was performed using data from a study of immigrants from the former Soviet Union to Israel (Ritsner, Modai, & Ponizovsky, 2000), where 23% of the variance in scores on mental health questionnaires was accounted for by the post-migratory factors they investigated. The calculation showed that a sample size of 53 achieves 81% power to detect an R-Squared of .23 attributed to 6 independent variables using an F-Test with a significance level (alpha) of .05. Based on these calculations, a target of 60 participants was set for the study.

Recruitment

The sole inclusion criteria for the current study was that participants were refugees, asylum seekers or failed asylum seekers and were over the age of 18. Participants were excluded if a clinician believed that involvement in the study would cause too much distress, or if other factors such as childcare responsibilities would have prevented them taking part in a confidential interview. Key workers or therapists asked participants if they would be interested in taking part. Individuals who indicated interest were contacted by the lead researcher and an appointment was made to provide information on the study (appendix 1) and complete the questionnaires. Forty-four

participants were recruited. Thirty-one participants (70%) were recruited from the specialist NHS trauma clinic, 11 (25%) from the outpatient psychology service and two (5%) from the refugee support agency. Of the 44 participants, three were excluded from further analysis because it was not possible to complete the questionnaires for reasons of not having an interpreter present, children being present or the interview taking an excessively long time.

At the trauma service all clients who were attending therapy in October 2006 (n=158) were included in the sampling frame. Of these, Fifty-one clients (32%) were asked if they would like to take part, with a further 14 clients (9%) excluded because they were discharged or judged by clinicians to be too distressed to participate. Clinicians were unable to ask the remaining 93 clients during therapy sessions for reasons including, pressing clinical and social concerns and clients attending the clinic infrequently. Of the 51 who were approached, 31 (61%) were interviewed, seven (14%) agreed but were not available for interviewing and a further 13 (25%) declined to take part. This equates to a response rate of 61% for clients who were asked to participate and represents 20% of the total number of clients at the clinic. Unfortunately, it was not possible to identify response rates for the outpatient psychology service or voluntary agency.

Of the 41 participants, 27 (66%) had been recognised as refugees or had British citizenship; 11 (27%) were asylum seekers and 3 (7%) were failed asylum seekers, having exhausted all rights of appeal and eligible for

deportation. Table 3 gives the demographic data for the sample and shows that participants were a broad cross section of refugees with individuals from a range of different backgrounds and current situations. Additional analysis showed that there were no consistent differences between the refugees, asylum seekers and failed asylum seekers on measures of demographics and exposure to trauma.

Table 3: Demographics characteristics of the sample (n=41)

Variable		N	%
Gender	Male	25	61
	Female	16	39
Age	Mean = 38.5 (SD=11.6)	Range	18 – 63
Area of origin	Middle East	13	32
	Africa	13	32
	Europe	10	24
	Asia	4	10
	South America	1	2
Marital status	Single	20	49
	Married/ cohabiting	18	43
	Widowed	3	8
Number of children under 18 years	None	21	51
	One	11	27
	Two	7	17
	Three	2	5
Schooling	Primary or less	10	24
	Secondary	8	20
	Tertiary	23	56
Occupation level in home country	Professional	6	14
	Managerial or skilled	23	56
	Unskilled	6	15
	Student	6	15

Ethical considerations

The study was reviewed by the London MREC (REC reference number: 06/MRE02/23) and ethical approval was granted on the 8th June 2006 (Appendix 2). Both the ethics committee and the clinical teams involved in the research questioned whether the study would have a significant negative impact on the participants. These considerations were taken into account

during interviews by using comprehensive informed consent procedures and checking with participants that they wanted to continue during the interview.

Whilst there is some evidence that trauma survivors may become upset by taking part in trauma research, the evidence does not support the assertion that participants may be retraumatised or overwhelmed (Griffin, Resick, Waldrop, & Mechanic, 2003). Indeed, there is growing evidence that the majority of trauma survivors find participation in research a positive experience and are able to cope with any distress that arises (e.g. Griffin et al., 2003; Newman, Walker, & Gefland, 1999; Walker, Newman, Koss, & Bernstein, 1997). Although research is limited, this effect appears to hold for refugees (Bögner, 2005; Dyregrov, Dyregrov, & Raundalen, 2000).

Measures

The main variables assessed were PTSD symptoms, emotional distress, self-rated health status, demographics and aspects of the post-migration environment suggested to have an effect on psychological wellbeing. A research participation questionnaire was also included to investigate responses to participation. With the exception of the demographic and post-migration situation questionnaire, all of the measures used in this study were designed for self-completion. However, because of time and funding constraints the measures were not translated into additional languages and were instead read to the participant in English with in-vivo interpretation provided where appropriate.

Harvard Trauma Questionnaire (Mollica et al., 1992; Mollica et al., 2004); Appendix 3

The Harvard Trauma Questionnaire (HTQ) was originally developed for use with South-East Asian refugees in clinical settings in the USA. It consists of five sections assessing personal characteristics, exposure to traumatic events, torture experiences, brain injury and post-traumatic symptoms. It has shown adequate psychometric properties across various cultures and ethnic groups (Kleijn, Hovens, & Rodenburg, 2001), has been widely used in research with refugees and is generally considered the "gold standard" for research with traumatised populations (Mollica et al., 2004).

For the current study the sections on traumatic events and mental health symptoms were used. The section on torture events was initially included, but was removed because it was judged too distressing for some participants. The trauma section investigates exposure to 38 traumatic events by asking whether or not they have been personally experienced. A previous study had used factor analysis to identify six categories of traumatic events (Mollica et al., 2004). As shown in Table 4, these categories were used in an adapted form in the current study. The traumatic events comprising each category are reported in full in appendix 3. The total number of traumas experienced and the number of traumas experienced in each category were used in the analysis for the present paper.

Table 4: Categories of traumatic events (Mollica et al., 2004)

Category	Example items
War-like conditions and witnessing violence	Lack of shelter Combat situation Forced evacuation
Injury, torture, confinement and coercion	Beating to the body Knifing or axing
Disappearance death, or injury of loved ones	Disappearance or kidnapping of spouse Murder or death due to violence of a child

The HTQ has 40 questions assessing psychopathology. Sixteen questions, such as "recurrent thoughts or memories of the most hurtful or traumatic events" assess prevalence of PTSD symptoms in the past week using DSM-IV criteria (American Psychiatric Association, 1994). The remaining 24 items assess additional problems found to be of concern to refugees that are not included within DSM-IV criteria. Examples include, "feeling guilty for having survived" and "hopelessness". All questions are answered using a Likert scale ranging from 1 = "not at all" to 4 = "extremely". The HTQ provides a continuous measurement of PTSD symptoms and a continuous measurement of additional problems commonly experienced by refugees. For the present paper, only the continuous PTSD symptom score was used, as this is a widely used and comparable measure of psychopathology. The measure of other problems commonly experienced by refugees was omitted.

A recommended clinical cut-off for PTSD of ≥2.5 has been determined for Indochinese populations. Whilst this may lack validity when applied to other populations (Ichikawa, Nakahara, & Wakai, 2006a), it will be used here to aid comparison with previous studies.

The Hopkins Symptom Checklist – 25 (Mollica et al., 2004; Mollica et al., 1987a); appendix 4

The Hopkins Symptom Checklist – 25 (HSCL-25) was originally developed in the 1950's as a clinical screening instrument for use in mental health settings. In the 1980's the measure was translated into different South-East Asian languages for use with refugees in the USA. Since then, the measure has been translated into several different languages and is widely used. The HSCL-25 is a 25-item questionnaire that assesses symptoms of depression and anxiety in the past week with items such as being "suddenly scared for no reason". Frequency is assessed on a Likert scale ranging from 1 = "not at all" to 4 = "extremely". It has shown adequate psychometric properties across various cultures and ethnic groups (Kleijn et al., 2001). The HSCL-25 provides a score for depression symptoms and non-specific emotional distress; only the latter will be reported here. As with the HTQ, the recommended clinical cut-off of ≥1.75 for Major Depressive Disorder will be used for comparison purposes.

The EuroQol 5D (Kind, Dolan, Gudex, & Williams, 1998); appendix 5

The EuroQol 5D (EQ-5D) is a short measure of health related quality of life, developed since 1987 by the EuroQol group – an international research network – to provide a standardised, non-disease-specific instrument (Kind et

al., 1998). Respondents rate their health across five dimensions – mobility, self-care, usual activities, pain/discomfort and anxiety/depression – on the basis of having no problem, a moderate problem or an extreme problem. A secondary part of the measure asks respondents to rate their health on a visual analogue scale ranging from 0 = "worst imaginable health state" to 100 = "best imaginable health state", and provides a self-rated assessment of health. A review established that there is adequate evidence for the reliability and validity of the measure (Coons, Rao, Keininger, & Hays, 2000). It is widely used and UK population norms exist (Kind et al., 1998). For the current study, only the results from the visual analogue scale (EQ VAS) will be reported.

Demographic and Post-Migration Difficulties Questionnaire (Steel et al., 1999); appendix 6

This questionnaire was originally designed for a study of Tamil asylum seekers in Australia and investigates post-migration experiences and problems. It was adapted for the current study by changing the list of problems assessed and by including questions on finances, standard of living and employment. Questions on finances and standard of living were adapted from the Whitehall II study (Marmot et al., 1991), whilst definitions of employment were adapted from the 2001 UK National Census (Office for National Statistics, 2004). The questionnaire has sections on demographics, asylum status, experience of detention, language ability and the severity of 16 post-migration and four asylum related problems experienced in the last 12 months, such as "How much of a problem has family separation been for you in the last 12 months". Post-migration problems are assessed on a five

point Likert scale ranging from 0 = "no problem at all" to 4 = "a very serious problem".

The 20 problems were reduced into five categories (Table 5) based on the results of a principal component analysis conducted in a previous study (Steel et al., 1999). Full groupings are reported in appendix 6. There are no data available from previous studies regarding the validity or reliability of the questionnaire. In the present study, internal consistency for this measure was good (Cronbach's alpha = .86), suggesting that all items were measuring a similar underlying construct.

Table 5: Groups of post-migration difficulties (Steel et al., 1999)

Category	Example items
Residency determination	Fears about being sent home Fears of being sent home
Health care, welfare and asylum	Poor access to healthcare Delays in processing your application
Threat to family	Separation from family Worries about family back at home
Adaptation difficulties	Lack of money (poverty) Housing problems*
Loss of culture and support	Boredom Poor access to food that you like

Short Form Social Support Questionnaire (Sarason, Sarason, Shearin, & Pierce, 1987); appendix 7

The Short Form Social Support Questionnaire (SSQ6) is a six-item questionnaire that assesses a mixture of practical and emotional support. It provides one quasi-structural measure (number of supports) and one global measure (satisfaction with support). For each question the respondent is required to list the initials of up to nine individuals known to them who provide the type of support outlined in items such as; "whom can you really count on to distract you from your worries when you feel under stress?". The respondent then rates their satisfaction with the support on a six point Likert scale ranging from 1 = "very dissatisfied" to 6 = "very satisfied". The SSQ6 has shown high internal consistency and high test-retest reliability (Sarason et al., 1987; Weinman, Wright, & Johnston, 1995).

For the current study, the measure was presented in an adapted form with respondents asked to say how many people provide a particular aspect of support, rather than listing the individuals concerned. This was because difficulties with administration of the questionnaire in its original form were identified during piloting.

The Duke-UNC Functional Social Support Questionnaire (Broadhead, Gehlbach, de Gruy, & Kaplan, 1988); appendix 8

The Duke-UNC Functional Social Support Questionnaire (Duke-UNC FSSQ) was included as a further measure of functional social support. It consists of

eight items such as "I get love and affection", which are responded to on a five point Likert scale ranging from 1 = "much less than I would like" to 5 = "as much as I would like". The measure provides scores on two scales, confidant support and emotional support. Construct validity, concurrent validity and discriminant validity have been demonstrated for the two scales (Broadhead et al., 1988).

The Reactions To Research Participation Questionnaire (Kassam-Adams & Newman, 2002); appendix 9

The reactions to research participation questionnaire (RRPQ) was initially designed to assess parent and child experiences of participating in research. The initial measure has been subsequently adapted by Brewin and colleagues (C.Brewin, personal communication, February 13, 2007) to investigate the experiences of participants in PTSD research. On the adapted measure, participants rate their level of agreement with 12 statements about research participation such as "being in this study was boring" on a five point Likert scale ranging from 1 = "strongly disagree" to 5 = "strongly agree". The original measure has demonstrated good internal consistency, with general support for its theoretical basis being reported (Kassam-Adams & Newman, 2002).

Procedure

In order to help participants feel safe and secure, where possible, interpreters who usually worked with the participants in clinical sessions were used for the interviews. Sixteen participants were interviewed with the assistance of an interpreter, with 11 interpreters used in the study. All

participants were read the information sheet and given an opportunity to ask questions. The consent form (appendix 1) was completed by the participant with the assistance of the interpreter where necessary. All questionnaires were presented orally with participants being given typed versions of the answer categories (e.g., "no problem at all, a bit of a problem" etc.); translated where necessary. Participants were paid £10 for their time and to cover travel expenses.

Results

Traumatic events

Participants reported exposure to a high number of traumatic events, with experience of 18 of the 38 traumatic events being reported by over half of the sample (Table 6). Commonly reported traumas included being exposed to a combat situation, physical injury and extreme human rights abuses, with torture being reported by 78% of the sample. The mean of total trauma events was 17 and the mean of traumatic events that involved injury or human rights abuses was nine. These results underscore the extreme nature of the traumas experienced, with all participants in the sample reporting at least four events that involved human rights abuses or injury.

Table 6: Traumatic events reported (n=41)

	N	%
Forced to hide	39	95
Beating to the body	37	90
Witness beatings to head or body	37	90
Other forced separation from family	34	82
Serious physical injury of family member or friend due to combat situation or landmine	33	80
Lack of food or water	32	78
Torture	32	78
Imprisonment	32	78
Enforced isolation from others	32	78
Confiscation or destruction of personal property	31	76
Combat situation	31	76
Forced evacuation under dangerous conditions	31	76
Lack of shelter	30	73
Witness torture	30	73
Ill health without access to medical care	29	71
Murder, or death due to violence, of family member or friend	28	68
Brainwashing	22	54
Disappearance or kidnapping of other family member or friend	22	54

Trauma group	**Mean (SD)**	**Range**
Total number of trauma events (Max = 38)	17.8 (4.7)	7 to 25
War-like conditions and witnessing violence (Max = 8)	6.1 (1.9)	0 to 8
Injury, torture, confinement and coercion (Max = 23)	9.3 (3.1)	4 to 15
Disappearance, death, or injury of loved ones (Max = 7)	2.4 (1.3)	0 to 5

Asylum and post-migration factors

There was a wide variation in the asylum experiences of participants. As reported above, out of 41 participants, 27 (66%) participants had been recognised as refugees or had British citizenship; 11 (27%) were asylum seekers and 3 (7%) were failed asylum seekers. The mean time spent in the UK was over six years (mean=80.3 months, SD=44.3, range 6 to 198) with a mean of over two years awaiting leave to remain (mean=33.0 months, SD=26.7, range 0 to 90), indicating that some participants had waited for over seven years for a final determination on their asylum status. Seven

people had been detained in the UK on immigration grounds with the time spent in detention ranging from one day to three years.

There was a similarly diverse range of socio-economic situations reported by participants. The majority of refugees (n=26) were receiving benefits, with only one refugee in paid employment. Six asylum seekers were receiving benefits, three were receiving financial support from the National Asylum Support Service (NASS), one was receiving voucher support from NASS and one asylum seeker reported having no source of income. One failed asylum seeker was receiving financial support from NASS, one continued to receive benefits and one was working.[3] Of the total sample 19 (46%) were studying or working for a mean of 13.2 hours per week (SD = 9.4, range 4 to 36). The majority (n= 17) were students, mostly studying English. Most participants (n=33) lived in local authority or NASS supported housing, with four participants reporting living in hotel or bed and breakfast accommodation and four reporting to be homeless. Single or widowed persons (n=21) reported a mean household weekly income of £59 (SD=31.5, range £0 - £130), whilst married and cohabiting persons (n=17) reported a mean of £139 (SD = 48.8, range £40 - 208). These figures do not take into account family size or financial responsibilities outside of the immediate family, such as supporting relatives in home countries. Twenty seven of the participants (66%) reported not having enough money for food and clothing often or always, with 24

---

[3] Asylum seekers and failed asylum seekers who were receiving benefits, were all individuals who had previously had exceptional leave to remain (where they were eligible for benefits) which had subsequently expired.

(58%) reporting to be dissatisfied or very dissatisfied with their standard of living, thus further underscoring the socioeconomic difficulties experienced by many participants. All participants had received some form of psychological therapy, with the mean time in therapy being over two years (mean=27.7 months, SD=20.8, range 0 to 72).

Post-migration problems

Of the 16 post-migration problems, nine were reported as being "serious or "very serious" by more than 50% of respondents, with the most frequently reported problems reflecting the difficulties of seeking asylum, such as uncertainty about the future, separation from families and communities and socioeconomic difficulties (Table 7). One problem "fear of being sent home" was reported as a "serious or very serious" problem by 49% (n=20) of participants. The remaining six problems - bad job conditions, physical or verbal abuse, problems accessing counselling services, problems accessing health services, problems accessing interpreters, access to preferred types of food - were all reported to be a "serious or "very serious" problem by less than a quarter of the sample. The problem groups of threat to family, adaptation difficulties and loss of culture and support had the highest mean scores.

The asylum related problems - problems with immigration officials, no permission to work, delays in applications - were all rated as "serious or very serious" by 10 or more of the 14 asylum seekers in the sample, with "uncertainty about residency" being endorsed as a problem by all of them.

Table 7: Post-migration factors reported (n=41)

	N	%
Post-migration problems rated as serious or very serious by >50% of the sample		
Uncertainty about the future	32	78
Not able to work	32	78
Separation from family	31	76
Lack of money	27	66
Housing problems	26	61
Isolation	24	59
Low number of social contacts	24	59
Worries about the family at home	23	56
Boredom	22	54
	Mean (SD)	**Range**
Post-migration problem groups		
Residency determination	1.4 (1.6)	0 to 4
Health, welfare and asylum	0.8 (0.7)	0 to 4
Threat to family	2.7 (1.3)	0 to 4
Adaptation difficulties	2.3 (0.9)	0 to 4
Loss of culture and support	2.1 (1.7)	0 to 4

Social support

With regards to social support, the mean number of supportive people in the lives of participants - as measured by the Short Form Social Support Questionnaire (SSQ6) - was 2.9 (SD=2.4, range 0 to 10). Participants listed professionals as well as family members and friends as sources of support. The mean score for the Duke-UNC confidant support scale was 3.1 (SD=1.6, range 1 to 6) and 3.6 (SD=1.7, range 1 to 6) for the Duke-UNC affective support scale. The SSQ6 further suggested that participants were generally satisfied with the help they received with 26 (63%) reporting to be satisfied or very satisfied, and only seven participants reporting being very or fairly

dissatisfied. This only indicates satisfaction with the actual support received, not satisfaction with the amount of support received.

Relationships between pre and post-migratory variables, psychopathology and health

Analysis of the main outcome measures showed that the total score for the Harvard Trauma Questionnaire PTSD score (HTQ PTSD) and the total Hopkins Symptom Checklist – 25 (HSCL-25) score were similar with means of 3.1 (SD=0.4, 2.2 to 3.7) and 2.9 (SD=0.5, 2.1 to 4.0) respectively. Thirty-four respondents (83%) met caseness for PTSD and all participants (n=41) reached caseness for Major Depressive Disorder. The mean EuroQol 5D self-rated health score (EQ VAS) score was 37.8 (SD=21.2, 0 to 90).

Prior to the main analyses, the data were examined for missing data and outliers. There was less than one percent of data missing. Following Tabachnick & Fidell (2001), missing data were estimated from other similar scores in the data set, or in the case of missing trauma data were scored as 'not experienced". Outlying cases were recoded to the next largest value within the normal range. Consideration of normality and linearity of the data led to a reflect square root transformation of HTQ-PTSD, as well as the post-migration problem groups: family threat, adaptation difficulties and loss of culture and support.

Hypothesis one stated that pre-migratory trauma experiences and aspects of the post-migration environment, such as the severity of post-migration

problems, asylum application status and unemployment would be associated with the three outcome measures: PTSD symptoms (HTQ PTSD), emotional distress (HSCL – 25) and self-rated health (EQ VAS). Because a wide range of post-migration factors were considered in the present study, it was necessary to reduce the number of variables prior to testing the hypothesis in order to limit multiple comparisons and thereby reduce the possibility of a Type 1 error (rejecting the null hypothesis, when it is true). Several approaches were taken to reduce the number of variables.

With regards to the three measures of social support, preliminary analysis showed that the Duke – UNC confidant support scale had a stronger Pearson's r association with the three outcome measures than the other two measures of social support (the Duke – UNC affective support scale and the SSQ6 total number of supports). For this reason, the Duke – UNC confidant support scale was included as a measure of social support in the testing of hypothesis one.

In order to limit the number of post-migration problems considered, only the nine problems identified as "serious or very serious" problems by over 50% of the sample were considered. One of these problems, "low number of social contacts" was removed from the analysis because of its similarity to the variable "isolation". Three of the post migration problem groups – threat to family, adaptation difficulties and loss of culture and support – were included in the analysis. The remaining two groups – residency determination

and health, welfare and asylum – were excluded, as they did not relate to enough participants to allow for meaningful analysis.

Two further post migration factors that were of strong a priori interest - asylum status and hours spent working or studying - were considered in the analysis. For asylum status, failed asylum seekers and asylum seekers formed one category and refugees the second. The total number of trauma events as opposed to other measures of previous trauma (e.g. number of traumas involving injury) was selected as it is the measure most commonly used in the existing literature. All remaining pre and post-migration factors, including demographic variables such as age and gender were not included in the analysis.

A total of 14 post migration factors and one pre migration factor (total number of traumas) were included for testing in hypothesis one. Preliminary analysis showed that the assumptions of parametric tests were met. Because asylum status required a test of group differences, a two-tailed t-test was employed. For the transformed HTQ-PTSD score the test showed that refugees reported marginally higher symptom scores (N= 27, M = .94, SD = .24) than asylum seekers (N = 14, M = .89, SD = .17), but this difference was not significant (t = .766, df = 39, p = .44). For total HSCL-25 score refugees scored similarly (N = 27, M = 2.9, SD = .48) to asylum seekers (N = 14, M = 3.0, SD = .52) and again this difference was not significant (t = .83, df = 39, p = .41). For EQ VAS health score, refugees rated their health as higher (N=

25, M = 41.4, SD = 22.1) than asylum seekers (N = 14, M = 31.4, SD = 19.0), but this difference was not significant (t = 1.4, df = 37, p = .16).

For all remaining tests, a two-tailed Pearson's r was used as a measure of association. Table 8 shows the results of the correlations.

Table 8: Pearson's correlations between pre and post-migration factors and outcome measures

Variable	HTQ PTSD r (p) n=41	HSCL-25 r (p) n=41	EQ VAS r (p) n=41
Total trauma score	.42 (.007)**	.38 (.01)**	-.35 (.03)*
Uncertainty about the future	.43 (.005)**	.41 (.008)**	-.32 (.05)*
Not able to work	.36 (.02)*	.22 (.15)	.16 (.34)
Separation from family	.14 (.39)	.01 (.92)	.21 (.19)
Lack of money	.32 (.04)*	.28 (.08)	.28 (.08)
Housing problems	.25 (.11)	.28 (.07)	.16 (.32)
Isolation	.22 (.16)	.44 (.004)**	-.32 (.05)*
Worries about the family at home	.29 (.07)	.27 (.09)	-.48 (.002)**
Boredom	.38 (.02)*	.45 (.003)**	-.36 (.02)*
Hours spent working or studying	-.35 (.02)*	-.42 (.007)**	.28 (.09)
Duke UNC – confidant support	-.33 (.04)*	-.26 (.10)	.13 (.43)
Post-migration problem groups			
Threat to family	.28 (.07)	.18 (.24)	.43 (.006)**
Adaptation difficulties	.51 (.001)***	.43 (.005)**	.32 (.05)*
Loss of culture and support	.40 (.01)**	.54 (<.0001)***	.34 (.04)*

* p≤.05, **p≤.01, ***p≤.001

As can be seen from Table 8, 24 of the associations were significant at the p=0.05 significance level, which supports the hypothesis that both pre and post-migratory factors would be related to psychopathology and health.

However, because of the increased likelihood of a Type 1 error, it was necessary to reduce the likelihood through the application of a Bonferroni correction (Tabachnick & Fidell, 2001). A Bonferroni correction is applied by dividing α by the number of comparisons conducted for each outcome variable in order to retain an overall significance level of p=0.05. In this case α (0.05) was divided by the number of comparisons undertaken for each separate outcome variable (15), leading to α for each comparison of 0.003.

When this more stringent approach was applied only four of the correlations were significant. These were HTQ PTSD and adaptation difficulties (r= .51, p = 0.001), boredom and HSCL-25 (r=.45, p=.003), loss of culture and support and HSCL-25 (r= .54, p<.0001) and worries about the family back at home and EQ VAS (-.48, p=.002). This more stringent approach provides only partial support for the hypothesis, showing that only post migration problems were associated with psychopathology and health. Pre migration trauma and factors such as unemployment or activity level and asylum status were not significantly associated.

Hypothesis two proposed that social support and other post-migratory factors would account for additional variance in PTSD symptoms, emotional distress and self-rated health when pre-migratory traumatic experiences had been accounted for. To test this hypothesis, three sequential multiple regression models were performed with PTSD symptoms (HTQ PTSD), emotional distress (HSCL-25) and self-rated health (EQ VAS) as the dependent variables and a range of post migration factors as the predictor variables.

The sequential multiple regression approach was chosen as it provides the researcher with the opportunity to input variables into the model according to logical or theoretical assumptions (Tabachnick & Fidell, 2001). This was necessary in the present study because of the need to test for the independent effects of post-migratory factors when traumatic experiences had already been accounted for. Prior to analysis, variables were assessed with regards to normality, linearity and homoscedasticity of the residuals and multi-collinearity and singularity, leading to the use of the previously transformed variables (Tabachnick & Fidell, 2001). Further tests showed that the remaining assumptions of multiple regression were met.

Because of the relatively small sample size in the current study, it was necessary to reduce the number of predictor variables entered into the models. Therefore Individual post migration problems (e.g. separation from family) were not considered for inclusion in the models. Instead groups of post migration problems (e.g. adaptation difficulties) were used. The regressions were further limited to post-migration factors which had shown significant associations to outcome variables (prior to the application of a Bonferroni correction) in the first round of analysis. This led to the omission of all demographic variables and the omission of some social support scales and other post-migratory factors. For the HTQ PTSD and HCL-25 models, the total number of traumas was used. However for the self rated health model (EQ VAS), the total number of traumas involving bodily injury was used in the model assessing self-rated health, as preliminary analysis

showed that it had a stronger association with self-rated health than total number of traumas.

Table 9 summarises the results for the three models performed. For HTQ-PTSD, trauma events was entered in the first model, followed by adaptation difficulties, loss of culture and support, hours working or studying and Duke UNC confidant support in the second. The introduction of the post migration variables led to a significant change (p=.02) in the variance explained, with this second model explaining 32% of the variance. For emotional distress (HSCL-25 score), total number of trauma events was entered in the first model, followed by adaptation difficulties, loss of culture and support and hours working or studying in the second. The addition of the post migration problems led to a significant change in the variance explained (P=.001) with the final model explaining 39% of the variance. For self-rated health (EQ VAS score), total number of bodily injury traumas was entered in the first step, followed by adaptation difficulties, loss of culture and support and family threat in the second. The addition of the post migration problems did not lead to a significant change in the variance explained (p=.08) with the final model accounting for 25% of the variance.

Table 9: Sequential regression models comparing total number of traumas and post-migration factors

Outcome variable	Model	Adjusted R^2	F (df)	Sig. model	F change	Sig. change
			(5,35)		(df) (4,35)	
HTQ PTSD	Model 1	.15	8.1	.007**	8.1	.007**
n=41	Model 2	.32	4.	.002**	3.5	.02*
			(4,36)		(3,36)	
HSCL-25	Model 1	.12	6.6	.01**	6.6	.01**
n=41	Model 2	.39	7.4	<.0001***	6.7	.001***
			(4,34)		(3,34)	
EQ VAS	Model 1	.16	8.6	.006**	8.6	.006**
n=39	Model 2	.25	4.2	.007**	2.4	.08

* p≤.05, **p≤.01, ***p≤.001

HTQ PTSD: Model 1 enter- total trauma events, Model 2 enter - adaptation difficulties, loss of culture and support, hours working or studying, Duke UNC confidant support

HSCL-25: Model 1 enter total trauma events, Model 2 enter - adaptation difficulties, loss of culture and support and hours working or studying

EQ VAS: Model 1 enter total injury traumas, Model 2 enter - adaptation difficulties, loss of culture and support and family threat

Table 10 reports standardised beta (β) and P values for all predictor variables in the three models. A higher standardised beta indicates a stronger relationship of the predictor variable to the outcome variable. For HTQ PTSD, the variable adaptation difficulties was a significant predictor (β = .36, p = .03) with trauma events and hours spent working or studying approaching significance. On the HSCL-25, loss of culture and support (β = .36, p = .03) and hours working or studying (β = -.33, p=.01) were significantly associated with emotional distress. On the EQ VAS, only number of traumas involving injury, torture, confinement and coercion was

significantly associated with poorer self-rated health (β = .30, p=.05), with family threat approaching significance.

Table 10: Standardised betas and significance levels for predictor variables in regression models

Predictor variable	Standardised beta	P
HTQ PTSD		
Trauma events	.27	.08
Adaptation difficulties	.36	.03*
Loss of culture and support	.07	.70
Hours working or studying	-.25	.07
Duke UNC - Confidant support	<.01	.10
HSCL 25		
Trauma events	.17	.22
Adaptation difficulties	.13	.41
Loss of culture and support	.36	.03*
Hours working or studying	-33	.01**
EQ 5D		
Total injury traumas	.30	.05*
Adaptation difficulties	.16	.33
Loss of culture and support	.09	.59
Family threat	.27	.08

* p≤.05, **p≤.01

The results provided general support for hypothesis two showing the importance of both pre and post-migration events. There was no observed relationship between psychopathology or health and confidant support, but there did appear to be some effect of general social support as indicated by the relationship of loss of culture and support to emotional distress. Post-migration problems exhibited a stronger relationship to psychopathology than pre-migration trauma on all outcome measures with the exception of self-rated health.

Experience of participation in the research

Twenty seven participants completed the Reactions to Research Participation Questionnaire. The results generally supported the notion that the research caused some distress to participants, but they remained pleased to have taken part. Twelve participants (44%) indicated that the study had caused some degree of distress, with 24 (89%) agreeing that they were glad to have been in the study, two disagreeing and one being unsure. One participant reported regret at being in the study and a further two were unsure. Twenty-four participants (89%) said they felt good about helping others by being in the study, with 17 (63%) agreeing that they study made them feel good about themselves. These results will be discussed in greater detail in section three of the thesis.

Discussion

Participants represented a diverse group of refugees and asylum seekers with a wide variation in traumatic experiences, asylum pathways and post-migration problems. Despite this variation, the results suggested that most respondents had endured very difficult experiences, with the majority reporting torture and a high proportion endorsing many of the post-migration problems as serious. Rates of co-morbid PTSD and depression were high with participants rating their overall health to be generally poor. The results offered partial support for the first hypothesis, showing an association between certain post-migration factors and psychopathology and health, but no association between trauma and psychopathology or health. The results provided partial support for the second hypothesis showing that post-

migration factors accounted for additional variance in psychopathology when trauma factors had been controlled for. For self-rated health, there was little association with post-migration factors, with the results suggesting that pre-migration trauma, in particular trauma involving injury, torture, confinement or coercion, was the most important predictive factor.

Several individual post-migration factors, such as isolation and groups of post migration problems, such as adaptation difficulties showed bivariate associations with psychopathology. However, when a Bonferroni correction was applied to control for a Type 1 error, only adaptation difficulties, boredom, a loss of culture and support and worries about the family back at home continued to show significant bivariate associations with any of the outcome measures. Results regarding social support were mixed. There was little relationship between outcome measures and the social support scales, but associations were observed between some outcome measures and a loss of culture and support. In multivariate analyses, the addition of post-migration factors into regression models controlling for pre-migration trauma suggested that these factors explained additional variance, with hours spent working or studying, adaptation difficulties and loss of culture and support showing significant associations with psychopathology. With regards to pre-migration trauma, the application of the Bonferroni correction to bivariate associations with outcome measures, meant that there were no significant relationships between trauma and outcome variables. In multiple regression models, the addition of total number of traumas resulted in significant regression models. However, with the addition of post migration factors,

previous trauma was not a significant predictor variable for psychopathology, but did remain a significant predictor for self-rated health.

The results suggest that the present study observed greater exposure to torture and traumatic events than is generally reported by epidemiological studies of refugees in host countries and within refugee camps (Cardozoa et al., 2004; de Jong et al., 2001; Lopes Cardozo et al., 2004; Marshall et al., 2005; Mollica et al., 1993; Mollica et al., 1999). As one would expect with a clinical sample drawn mainly from a specialist PTSD service, scores indicated that the majority of the sample exceeded the diagnostic threshold for co-morbid PTSD and depression. This far exceeds the rates within epidemiological samples, which mostly range from 15% to 60% for both PTSD and depression, depending on the setting and the population involved (Cardozo et al., 2000; de Jong et al., 2001; Lopes Cardozo et al., 2004; Marshall et al., 2005; Mollica et al., 1993; Mollica et al., 1999; Turner et al., 2003). The severity of the health problems experienced by the sample was further underscored by the low level of self-rated health. The mean self-rated health score (EQ VAS) of the sample was 38 which is less than half the mean reported in a study of a UK general population aged between 18 to 60 years (Kind et al., 1998), and approaching half of the mean score from a sample of 166 patients with schizophrenia or related psychotic disorders (Konig, Roick, & Angermeyer, 2007). These results support previous studies which have shown the markedly reduced rates of self-rated health in refugee populations compared to general population samples (Cardozo et al., 2000; Lopes Cardozo et al., 2004).

With regards to the severity of post-migration problems, limited comparison to studies in Australia, which have investigated the effects of post-migration problems on mental health, is possible (e.g. Silove et al., 1997; Steel et al., 2006). It seems that a greater proportion of the current sample reported a higher number of problems to be "serious or very serious" than in previous studies, which would indicate that in addition to experiencing a greater number of traumas and having poorer psychological health, participants in the current study also had a greater number of post-migration problems.

This was the first UK study of the relationships between a wide range of post-migration problems, social support and the mental health of refugees in the UK. Whilst there was some limited evidence that showed that pre-migration trauma was associated with greater psychopathology and poorer self-rated health, the results were generally inconsistent with the majority of epidemiological refugee studies conducted in developed and developing countries which have shown strong relationship[s between trauma and psychopathology (e.g. Cardozo et al., 2000; de Jong et al., 2001; Lopes Cardozo et al.; e.g. Marshall et al., 2005; Turner et al., 2003). This effect was unexpected, but has however been observed in a similarly heterogeneous sample of torture survivors referred for medico-legal reports to a charity in London (Van Velsen, Gorst Unsworth, & Turner, 1996). As suggested by the authors of this report (Van Velsen et al., 1996), the most likely explanation for the reduced association is that the use of a composite score of trauma items does not adequately describe the severity of traumas experienced because

of the extreme nature of torture and the other human rights abuses experienced.

Several problems related to adaptation difficulties, such as uncertainty about the future and boredom, showed stronger bivariate associations with psychopathology than previous number of traumas. This effect remained in the multivariate analyses where the addition of post-migration problems led to a significant increase in the variance, with post-migration variables showing a stronger relationship to both PTSD symptoms and emotional distress than previous trauma. The exception was self-rated health, where number of traumas remained the only significant predictor. These results broadly support the findings of a number of studies (e.g. Laban et al., 2005; Silove et al., 1997; Steel et al., 1999) which have shown the impact the post-migratory environment may have on the mental health of refugees.

Whilst the results clearly show the effect of post-migration problems, which aspects of the post-migration situation act as risk or protective factors for mental health problems is less clear because of the small sample and the number of problems investigated. Nevertheless, some tentative conclusions can be drawn from the present results.

The questionnaire based measures of social support showed little relationship to either psychopathology or health. Of the four support constructs assessed, only confidant support showed a significant bivariate relationship with PTSD symptoms which was not maintained in the

multivariate analysis. However, the group of problems related to a loss of culture and support showed a strong bivariate association. The limited effect of social support is inconsistent with previous studies which have shown the protective effect of social support, both in studies of refugees (e.g. Cheung & Spears, 1995; Ghazinour et al., 2004; Gorst-Unsworth & Goldenberg, 1998; Pernice & Brook, 1996; Takeda, 2000) and in general population studies (Brissette et al., 2000). Two explanations for this discrepancy are possible: firstly that the standardised measures did not reliably measure constructs of social support in the different cultural groups and secondly, that the effect of social support was reduced because of the severity of mental health and post-migration problems experienced by respondents. Whilst the questionnaire based measures of social support have been used widely with different cultural groups, there appeared to be some difficulties with their use in the current study, with participants confused by some of the wording. Considering the strong relationship observed in the current study between post-migration factors related to support and psychopathology, and the observed difficulties with the social support questionnaires, the first explanation may be more likely.

Bivariate associations were observed between psychopathology and several aspects of the post-migration environment. However, when multiple comparisons were taken into account, only adaptation difficulties, boredom, loss of culture and support and worries about the family back at home continued to show significant associations. In multivariate analyses, less hours spent working or studying and a loss of culture and support were

associated with increased emotional distress, whilst adaptation difficulties were associated with increased PTSD symptoms. No post-migration factors were associated with self-rated health in multivariate analysis. These results provide support for the growing evidence base which suggests that factors mediated in part by the asylum process, such as adaptation difficulties, economic and employment opportunities and uncertainty, have an influence on psychopathology (e.g. Laban et al., 2005; Silove et al., 1997; Steel et al., 1999).

It could be argued that the correlational relationships between post-migration problems and psychopathology are because people with greater mental health problems perceive their situation more negatively and are therefore more likely to report a greater number of problems. Whilst this possibility cannot be fully discounted, the correspondence between the current results and previous research, as well as the identification of similar findings when studies have assessed objective measures, such as the effect of length of time spent seeking asylum (e.g. Laban et al., 2004), or comparing individuals with or without permanent leave to remain (e.g. Steel et al., 2006), would reduce this possibility. Furthermore, the results are consistent with theoretical models suggesting the importance of factors such as safety, attachment and role identity (e.g. Silove, 1999), as well as clinical observations of the importance of safety and security in the post-migration environment (National Institute for Clinical Excellence, 2005).

Limitations

Some limitations to the study add a degree of complexity to the interpretation of the results. It was a largely correlational study with a relatively small sample size considering the number of statistical tests conducted. The use of multiple bivariate comparisons would have increased the likelihood of a Type 1 error. However, Bonferroni corrections were applied to control for this. Whilst this would have reduced the power of the tests and increased the likelihood of a Type 2 error, the advantage was that it suggests that the significant bivariate associations observed after the correction was applied were not due to chance. With regards to the multiple regression analysis, the ratio of cases to independent variables was relatively low, with the sample size (n= 41) being slightly below the lower bound of the power calculation (n=48). This is likely to have reduced the power of the multiple regressions to detect significant associations between individual predictor variables and outcome variables. These limitations mean that whilst the overall finding showing the importance of post-migration factors is robust, the more detailed results such as, which factors may or may not be of importance need to be interpreted with caution.

The use of a clinical convenience sample with a high number of post-migratory problems and severe psychological problems may have introduced ceiling effects into the results and reduced the power of the tests to detect predictor variables, with the use of a trauma checklist introducing further difficulty as it may not have adequately described the traumatic experiences of participants. Unfortunately, whilst one of the initial aims of the study was to

investigate the impact of asylum status, this was not possible because of the low number of asylum seekers in the sample.

A further potential source of error was the use of in-vivo translation. It has been suggested that when standardised measures are used across different cultural groups they undergo a method of translation which ensures cultural equivalence in the terms and constructs across different languages (Mollica et al., 2004). Budgetary and time constraints meant this was not feasible in the current study which introduces the possibility that some of the constructs, such as the post-migration problems, social support and the questions for the outcome measures, were not fully understood by participants. This appeared to be particularly true for the social support measures. In other areas, the use of highly experienced mental health interpreters would have reduced this effect, especially in the areas normally addressed in clinical settings, such as previous traumas, asylum applications, housing and mental health.

It is arguable that several sampling biases in the current study reduce the applicability of the results to other populations. As one would expect with a clinical sample, the extent of the traumas experienced and the severity of the mental health problems reported was greater than in non-clinical populations, which may suggest that the results only apply to refugees in clinical settings. Furthermore, participants were primarily from an inner city area of London, suggesting that the results may have limited applicability to refugees in other UK settings. Other limitations that affected this study and are a problem for refugee research more generally include, the validity of psychological

measures used cross-culturally and the heterogeneity in trauma and post-migratory experiences of different populations of refugees.

However, whilst there may be differences between disparate populations of refugees with regards to the severity of the human rights abuses endured, rates of psychological problems, differences in help seeking behaviour and variation in the post-migration environment, the evidence to date shows a high degree of consistency by indicating a strong relationship between psychological distress and the post-migration environment. The present study is no exception and has highlighted similar results to those found in other countries with different populations of refugees. This would suggest that, whilst a degree of caution is required in applying the results to other non-clinical populations in the UK, the overall finding of a strong relationship between mental health and post-migration factors is likely to be as applicable to other groups of refugees living in inner city areas of the UK.

Implications

The results highlight the strong association between post-migration factors and mental health, which suggests that clinical interventions would be most effective if they are holistic and address the multifaceted problems of refugees. This reflects clinical observations and recommendations which have indicated the use of a phased model of intervention when working with refugees (Blackburn et al., 2003; Gorman, 2001; National Institute for Clinical Excellence, 2005).

Whilst there was no direct investigation of the problems experienced by asylum seekers, some implications for asylum policy can be inferred from the results. The consistent overall finding that uncertainty, reduced meaningful activity, a loss of culture and support and adaptation difficulties are associated with psychological problems suggests that some aspects of current UK asylum policy may have a negative impact on the mental health of refugees. Practices including the removal of indefinite leave to remain, no right to work and restricted rights to education may increase uncertainty and reduce integration and support.

The current study highlights the need for further research investigating the relationship between post-migration factors and mental health. In particular, the current study has highlighted the need for epidemiological or longitudinal studies to investigate the impact that different problems, aspects of the asylum system and protective factors may have on the psychological health of refugees. Information from the current evidence base as well as further rigorous studies can help inform both asylum policy and the development of wide-ranging interventions from a sound theoretical base. Increased dialogue and partnership between government departments responsible for asylum policy and researchers will help to focus future research on the most pressing concerns and will facilitate the quick dissemination and implementation of findings.

Conclusion

This study, being the first in the UK to investigate a range of post-migratory factors, has provided some preliminary evidence suggesting that the post-

migration environment has an impact on the mental wellbeing of refugees and asylum seekers in the UK. Despite some obvious limitations, the results are supportive of findings from other countries and add to the growing evidence base suggesting that both interventions and government policy need to consider factors in the wider environment that may protect or threaten the wellbeing of refugees. Addressing these factors requires interventions ranging from the individual to the political level and the partnership of organisations and individuals from different professional and non-professional backgrounds to provide the range of help and support needed by refugees.

References

American Psychiatric Association. (1994). *Diagnostic and Statistical Manual of Mental Disorders, Fourth edition*. Washington, DC: American Psychiatric Association.

Andrade, L., Caraveo Anduaga, J. J., Berglund, P., Bijl, R. V., De Graaf, R., Vollebergh, W., et al. (2003). The epidemiology of major depressive episodes: Results from the International Consortium of Psychiatric Epidemiology (ICPE) Surveys. *International Journal of Methods in Psychiatric Research, 12*, 3-21.

Bhui, K., Craig, T., Mohamud, S., Warfa, N., Stansfeld, S. A., Thornicroft, G., et al. (2006). Mental disorders among Somali refugees: Developing culturally appropriate measures and assessing socio-cultural risk factors. *Social Psychiatry And Psychiatric Epidemiology, 41*, 400-408.

Blackburn, P., Herlihy, J., & Turner, S. (2003). Pre-meeting Institute: A phased clinical intervention for refugees, *Abstracts of the VIII European conference on Traumatic Stress*. Berlin.

Breslau, N., Kessler, R. C., Chilcoat, H. D., Schultz, L. R., Davis, G. C., & Andreski, P. (1998). Trauma and posttraumatic stress disorder in the community: The 1996 Detroit Area Survey of Trauma. *Archives of General Psychiatry, 55*, 626-632.

Brissette, I., Cohen, S., & Seeman, T. E. (2000). Measuring Social Integration and Social Networks. In S. Cohen, L. G. Underwood & B. H. Gottlieb (Eds.), *Social Support Measurement And Intervention: A guide for health and social scientists*. Oxford: Oxford University Press.

Broadhead, W. E., Gehlbach, S. H., de Gruy, F. V., & Kaplan, B. H. (1988). The Duke-UNC Functional Social Support Questionnaire: Measurement of social support in family medicine patients. *Medical Care, 26*, 709-723.

Bögner, D. (2005). *What prevents refugees and asylum seekers exposed to violence from disclosing trauma?* Unpublished Doctorate in Clinical Psychology thesis, University College London.

Cardozo, B. L., Vergara, A., Agani, F., & Gotway, C. A. (2000). Mental health, social functioning, and attitudes of Kosovar Albanians following the war in Kosovo. *JAMA, 284*, 569-577.

Cardozoa, B. L., Talley, L., Burton, A., & Crawford, C. (2004). Karenni refugees living in Thai-Burmese border camps: Traumatic experiences, mental health outcomes, and social functioning. *Social Science and Medicine, 58*, 2637-2644.

Cheung, P., & Spears, G. (1995). Psychiatric morbidity among New Zealand Cambodians: the role of psychosocial factors. *Social Psychiatry & Psychiatric Epidemiology, 30*, 92-97.

Chung, R. C., & Bemak, F. (1996). The effects of welfare status on psychological distress among Southeast Asian refugees. *Journal of Nervous and Mental Disease, 184*, 346-353.

Coons, S. J., Rao, S., Keininger, D. L., & Hays, R. D. (2000). A comparative review of generic quality-of-life instruments. *Pharmacoeconomics, 17*, 13-35.

de Jong, J. T. V. M., Komproe, I. H., Van Ommeren, M., El Masri, M., Araya, M., Khaled, N., et al. (2001). Lifetime events and posttraumatic stress disorder in 4 post-conflict settings. *JAMA, 286*, 555-562.

Dyregrov, K., Dyregrov, A., & Raundalen, M. (2000). Refugee families' experience of research participation. *Journal of Traumatic Stress, 13*, 413-426.

Ghazinour, M., Richter, J., & Eisemann, M. (2004). Quality of life among Iranian refugees resettled in Sweden. *Journal of Immigrant Health, 6*, 71-81.

Gorman, W. (2001). Refugee survivors of torture: Trauma and treatment. *Professional Psychology: Research and Practice, 32*, 443-451.

Gorst-Unsworth, C., & Goldenberg, E. (1998). Psychological sequelae of torture and organised violence suffered by refugees from Iraq: Trauma-related factors compared with social factors in exile. *British Journal of Psychiatry, 172*, 90-94.

Griffin, M. G., Resick, P. A., Waldrop, A. E., & Mechanic, M. B. (2003). Participation in trauma research: Is there evidence of harm? *Journal of Traumatic Stress, 16*, 221-227.

Hauff, E., & Vaglum, P. (1995). Organised violence and the stress of exile. Predictors of mental health in a community cohort of Vietnamese refugees three years after resettlement. *British Journal of Psychiatry, 166*, 360-367.

Hintze, J. (2004). NCSS and PASS. Utah: Number Cruncher Statistical Systems.

Home Office. (2006). *Asylum statistics United Kingdom 2005*. London: Home Office Research Development and Statistics Directorate (Available: www.homeoffice.gov.uk/rds).

Hull, S. A., & Boomla, K. (2006). Primary care for refugees and asylum seekers. *BMJ, 332*, 62-63.

Information Centre for Asylum and Refugees. (2006). *ICAR Briefing May 2006: Destitution amongst refugees and asylum seekers in the UK*. Available: www.icar.org.uk.

Ichikawa, M., Nakahara, S., & Wakai, S. (2006a). Cross-cultural use of the predetermined scale cutoff points in refugee mental health research. *Social Psychiatry And Psychiatric Epidemiology, 41*, 248-250.

Ichikawa, M., Nakahara, S., & Wakai, S. (2006b). Effect of post-migration detention on mental health among Afghan asylum seekers in Japan. *Australian and New Zealand Journal of Psychiatry, 40*, 341-346.

Kassam-Adams, N., & Newman, E. (2002). The reactions to research participation questionnaires for children and for parents (RRPQ-C and RRPQ-P). *General Hospital Psychiatry, 24*, 336-342.

Keane, T. M., Marshall, A. D., & Taft, C. T. (2006). Posttraumatic stress disorder: Etiology, epidemiology, and treatment outcome. *Annual Review of Clinical Psychology, 2*, 161-197.

Kind, P., Dolan, P., Gudex, C., & Williams, A. (1998). Variations in population health status: results from a United Kingdom national questionnaire survey. *BMJ, 316*, 736-741.

Kleijn, W. C., Hovens, J. E., & Rodenburg, J. J. (2001). Posttraumatic stress symptoms in refugees: Assessments with the Harvard Trauma Questionnaire and the Hopkins Symptom Checklist-25 in different languages. *Psychological Reports, 88*, 527-532.

Konig, H. H., Roick, C., & Angermeyer, M. C. (2007). Validity of the EQ-5D in assessing and valuing health status in patients with schizophrenic, schizotypal or delusional disorders. *European Psychiatry, 22*, 177-187.

Laban, C. J., Gernaat, H. B., Komproe, I. H., Schreuders, B. A., & de Jong, J. T. (2004). Impact of a long asylum procedure on the prevalence of psychiatric disorders in Iraqi asylum seekers in The Netherlands. *Journal of Nervous and Mental Disease, 192*, 843-851.

Laban, C. J., Gernaat, H. B., Komproe, I. H., van der Tweel, I., & de Jong, J. T. V. M. (2005). Postmigration living problems and common psychiatric disorders in Iraqi asylum seekers in the Netherlands. *Journal of Nervous and Mental Disease, 193*, 825-832.

Lie, B. (2002). A 3-year follow-up study of psychosocial functioning and general symptoms in settled refugees. *Acta Psychiatrica Scandinavica, 106*, 415-425.

Lie, B., Sveaass, N., & Eilertsen, D. E. (2004). Family, activity, and stress reactions in exile. *Community, Work and Family, 7*, 327-350.

Lopes Cardozo, B., Bilukha, O. O., Gotway Crawford, C. A., Shaikh, I., Wolfe, M. I., Gerber, M. L., et al. (2004). Mental health, social functioning, and disability in Post-war Afghanistan. *JAMA, 292*, 575-584.

Marmot, M. G., Smith, G. D., Stansfeld, P. C., North, F., Head, J., White, L., et al. (1991). Health inequalities among British civil servants: the Whitehall II study. *The Lancet, 337*, 1387-1393.

Marshall, G. N., Schell, T. L., Elliott, M. N., Berthold, S. M., & Chun, C. A. (2005). Mental health of Cambodian refugees 2 decades after resettlement in the United States. *JAMA, 294*, 571-579.

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

Mollica, R. F., Donelan, K., Tor, S., Lavelle, J., Elias, C., Frankel, M., et al. (1993). The effect of trauma and confinement on functional health and mental health status of Cambodians living in Thailand-Cambodia border camps. *JAMA, 270*, 581-586.

Mollica, R. F., McDonald, L. S., Massagli, M. P., & Silove, D. M. (2004). *Measuring Trauma, Measuring Torture - Instructions and guidance on the utilization of the Harvard program in refugee trauma's versions of the Hopkins Symptom Checklist (HSCL-25) & The Harvard Trauma Questionnaire (HTQ)*. Cambridge MA: Harvard Program in Refugee Trauma.

Mollica, R. F., McInnes, K., Poole, C., & Tor, S. (1998). Dose-effect relationships of trauma to symptoms of depression and post-traumatic stress disorder among Cambodian survivors of mass violence. *British Journal of Psychiatry, 173*, 482-488.

Mollica, R. F., McInnes, K., Sarajlic, N., Lavelle, J., Sarajlic, I., & Massagli, M. P. (1999). Disability associated with psychiatric comorbidity and health status in Bosnian refugees living in Croatia. *JAMA, 282*, 433-439.

Mollica, R. F., Wyshak, G., de Marneffe, D., Khuon, F., & Lavelle, J. (1987). Indochinese versions of the Hopkins Symptom Checklist-25: A screening instrument for the psychiatric care of refugees. *American Journal of Psychiatry, 144*, 497-500.

National Institute for Clinical Excellence. (2005). *The management of PTSD in adults and children in primary and secondary care. National Clinical Practice Guideline Number 26.* London: Gaskell and the British Psychological Society.

Newman, E., Walker, E. A., & Gefland, A. (1999). Assessing the ethical costs and benefits of trauma-focused research. *General Hospital Psychiatry, 21*, 187-196.

Office for National Statistics. (2004). *Census 2001: definitions*. London: HMSO. Retrieved 2/6/06 from http://www.statistics.gov.uk/statbase/Product.asp?vlnk=12951.

Pernice, R., & Brook, J. (1996). Refugees' and immigrants; mental health: Association of demographic and post-immigration factors. *Journal of Social Psychology, 136*, 511-519.

Porter, M., & Haslam, N. (2005). Predisplacement and Postdisplacement Factors Associated With Mental Health of Refugees and Internally Displaced Persons: A Meta-analysis. *JAMA, 294*, 602-612.

Refugee Council. (2005). *The Government's five-year asylum and immigration strategy*. Retrieved 4/8/06 from www.refugeecouncil.org.uk.

Ritsner, M., Modai, I., & Ponizovsky, A. (2000). The stress-support patterns and psychological distress of immigrants. *Stress Medicine, 16*, 139-147.

Sarason, I. G., Sarason, B. R., Shearin, E. N., & Pierce, G. R. (1987). A Brief Measure of Social Support: Practical and Theoretical Implications. *Journal of Social and Personal Relationships, 4*, 497-510.

Silove, D. (1999). The psychosocial effects of torture, mass human rights violations, and refugee trauma: Toward an integrated conceptual framework. *Journal of Nervous and Mental Disease, 187*, 200-207.

Silove, D., Sinnerbrink, I., Field, A., Manicavasagar, V., & Steel, Z. (1997). Anxiety, depression and PTSD in asylum-seekers: Associations with pre-migration trauma and post-migration stressors. *British Journal of Psychiatry, 170*, 351-357.

Steel, Z., Silove, D., Bird, K., McGorry, P., & Mohan, P. (1999). Pathways from war trauma to posttraumatic stress symptoms among Tamil asylum seekers, refugees, and immigrants. *Journal of Traumatic Stress, 12*, 421-435.

Steel, Z., Silove, D., Brooks, R., Momartin, S., Alzuhairi, B., & Susljik, I. (2006). Impact of immigration detention and temporary protection on the mental health of refugees. *British Journal of Psychiatry, 188*, 58-64.

Tabachnick, B. G., & Fidell, L. S. (2001). *Using Multivariate Statistics (4th edition)*. Boston: Allyn and Bacon.

Takeda, J. (2000). Psychological and economic adaptation of Iraqi male refugees: Implications for social work practice. *Journal of Social Service Research, 26*, 1-21.

Turner, S. W., Bowie, C., Dunn, G., Shapo, L., & Yule, W. (2003). Mental health of Kosovan Albanian refugees in the UK. *British Journal of Psychiatry, 182*, 444-448.

UNHCR. (1992). *Handbook on Procedures and Criteria for Determining Refugee Status under the 1951 Convention and the 1967 Protocol Relating to the Status of Refugees*. Geneva: UNHCR. Retrieved 14/6/06 from www.unhcr.org.

UNHCR. (2006a). *2005 Global Refugee Trends. Statistical overview of populations of refugees, asylum seekers, internally displaced persons, stateless persons, and other persons of concern to UNHCR*. Geneva: UNHCR. Retrieved 14/6/06 from www.unhcr.org.

UNHCR. (2006b). *Asylum Levels and Trends in Industrialised Countries, 2005.* Geneva: UNHCR. Retrieved 14/6/06 from www.unhcr.org.

UNHCR. (2006c). *State of the World's Refugees, Human displacement in the new millennium*. Oxford: Oxford University Press. Retrieved 14/6/06 from www.unhcr.org.

Van Velsen, C., Gorst Unsworth, C., & Turner, S. (1996). Survivors of torture and organized violence: demography and diagnosis. *Journal of Traumatic Stress, 9*, 181-193.

Walker, E. A., Newman, E., Koss, M., & Bernstein, D. (1997). Does the study of victimization revictimize the victims? *General Hospital Psychiatry, 19*, 403-410.

Weinman, J., Wright, S., & Johnston, M. (Eds.). (1995). *Measures in health psychology: A users portfolio*. Windsor, UK: NFER-Nelson.

Part 3: Critical appraisal

Critical Appraisal

This thesis is the culmination of several longstanding interests of mine, namely cross-cultural psychology, human rights and community psychology. These interests informed the focus of the research and led to me undertaking my final year specialist clinical placement with a refugee psychology team. Completing my specialist placement and thesis research with the same team gave me the opportunity to consider in depth issues related to both research and clinical practice with refugees. As a result I have developed a deeper understanding of how the stories I heard during research interviews were related to issues of clinical and social importance and how my clinical experiences were being reflected in my research with these marginalised people. It also gave me time to consider the personal impact of working with people who so often relay stories that are deeply distressing and show the worst aspects of humanity. These stories brought into focus the sheer scale of the suffering caused by war and human rights abuses around the world, thereby increasing my awareness and interest in geopolitical events and challenging my own worldview. However my work with refugees also highlighted some of the best aspects of humanity, including the diversity of cultures, the resilience, dignity and conviction of individuals and the commitment of people to equality and human rights.

These themes relate to three important aspects of the present study and will form the basis of this critical appraisal. The first concerns the ethics of refugee research and the importance of employing a broad ethical

framework. The second relates to difficulties of adapting measures for cross-cultural research. The third concerns the political nature of work with refugees and the role of psychology in influencing governmental policy.

Ethics and refugee research

Two main arguments suggest there are specific ethical issues related to research with refugees. Firstly that research with minority ethnic groups has historically in some cases led to a risk of increased stigmatisation or harm (Fisher et al., 2002) and secondly that individuals who have experienced traumatic events have been assumed to be at increased risk of substantial emotional distress when participating in research (Dyregrov et al., 2000).

To address these concerns, published guidelines for research with minority ethnic groups (e.g. Fisher et al., 2002), recommend that researchers give particular consideration to, the impact of societal factors, such as discrimination, on mental health; the provision of information about the research in an understandable format and language, and consultation with service users and representatives during research design (Fisher et al., 2002). Similarly, guidelines on research with traumatised populations (e.g. Collogan, Tuma, Dolan-Sewell, Borja, & Fleischman, 2004) have provided a number of suggestions including that researchers carefully consider the benefits and risks of the research and that participants are provided with clear information about the potential for emotional distress.

In designing and implementing this study, several discussions were held about ethics which improved the quality of the study. Whilst these considerations did not meet all the stipulated guidelines, they went some way in ensuring that the research was ethical and conducted respectfully. Central to this was consultation with clinicians involved in the research. Whilst it was not feasible to consult with members of refugee communities because of time constraints, I consulted with the clinical teams involved in the research on a number of occasions, to design a study that would be relevant at both clinical and policy levels.

Initially I was interested in studying the effect of social support on psychological wellbeing and had given little consideration to the wider post-migration environment. However, consultations with the clinical teams suggested that in addition to social support, there were a number of other issues such as restrictions to work, effects of the asylum application system and socioeconomic problems that may have a negative impact on mental health. These discussions led to the broadening of the research to investigate the wider post-migration environment, whilst at the same time helping to remove questions that may have been extraneous or distressing. One example was the removal of questions on religion because the clinical team suggested that the loss of religious conviction that sometimes follows human rights abuses or torture might be a source of distress and concern for some clients. As an investigation of religion was not central to the study, questions on this were dropped.

The discussions also assisted thinking about the other major ethical concern raised by the clinical teams and the ethics committee, namely, the effect of the research on participants. In discussing this, it was useful to draw on the growing evidence base which suggests that the majority of trauma survivors find participation in research a positive experience and are able to cope with the distress that arises (e.g. Collogan et al., 2004; Griffin et al., 2003; Newman et al., 1999; Walker et al., 1997). The limited studies conducted with refugees have supported these findings and have highlighted the potential positive effects research may have, such as assigning meaning to events, or the knowledge that participation in the research may help others (e.g., Bögner, 2005; Dyregrov et al., 2000).

In an effort to better understand the experiences of participants in the current study, an adapted version of the Reactions to Research Participation Questionnaire (RRPQ) (Kassam-Adams & Newman, 2002) was included. On this measure, participants rate their level of agreement with 12 statements about research participation such as "being in this study was boring" on a five point Likert scale ranging from 1 = "strongly disagree" to 5 = "strongly agree". The results (Table 11) showed that whilst half of the respondents agreed that the research caused some distress, 89% agreed that they were glad to have been in the study, with a high proportion agreeing that the study made them feel good about themselves (63%) or good about helping others (89%). The results further suggested that participants felt able to decline answering questions and that informed consent and information procedures were followed.

Table 11: Results of the Reactions to Research Participation Questionnaire (n=27)

Question	Agree n (%)	Maybe n (%)	Disagree n (%)
Being in this study was boring	2 (7)	2 (7)	23 (86)
I am glad I was in this study	24 (89)	1 (4)	2 (7)
It was my choice if I was in the study	27 (100)		
Being in this study made me feel upset or sad	12 (44)	6 (22)	9 (33)
The things I said will stay private	26 (96)	1 (4)	
I am sorry I was in this study	1 (4)	2 (7)	24 (89)
Being in this study made me feel good about myself	17 (63)	6 (22)	4 (15)
I was told the truth about the study before it started	27 (100)		
I feel good about helping other people by being in this study	24 (89)	3 (11)	
I knew I could skip questions or parts of the study if I wanted to	27 (100)		
I knew I could stop at any time	27 (100)		
I knew I could ask to take a break at any time	27 (100)		

Unfortunately, three participants indicated regret or possible regret at taking part. Closer inspection of the results showed that these three participants also indicated that they felt good about helping others by being in the study, which suggests that feelings of regret were balanced against some positive experiences of the research. These participants declined to make any further comments about the research and I did not ask them about their reasons for regretting taking part. However, my subjective impression was that the study

had caused these participants to think about their past traumas and had led to a temporary lowering of mood; an effect often observed when conducting exposure or reliving interventions with traumatised refugees.

Some participants (n=8) made additional comments about the interview, which were recorded verbatim. Comments reflected the possible sadness created by taking part:

> If you got things that you don't feel happy about, [talking] can make you feel better. But it makes you feel sad because of talking about what happened (ID 22)

As well as the desire of participants to take part in something that can help others:

> I just hope that my information will contribute to other people and give them strength (ID 30)

> Hopefully this research is going to help other people to manage with their situation.(ID 40)

One quote also reflected the possible positive effects of participation:

> I am glad I was in this study. By doing this study I feel like I help people like me through bad time and make it different (ID 25)

Whilst these results are limited because the questionnaire was not completed anonymously or confidentially - which may have led to the possibility of positively biased answers - they suggest that participants found the research to be a positive experience with all participants reporting that it was their choice to be in the study. These findings are consistent with the growing evidence base which highlights the need to balance concerns regarding vulnerability and distress with the potential benefits of research and the rights of individuals to make an informed choice about participation. However, the fact that a minority of respondents regretted being in the study, suggests the importance of developing stringent informed consent procedures and creating an experience where the participant feels in control and able to decline answering questions or withdraw from the research.

The present study highlighted many of the particular ethical concerns in researching refugee issues, as well as the importance of consultation with others to resolve these issues. It showed me the need to consider ethical issues in detail and the strength this can bring to the research process. Hearing the stories of torture survivors, seeing the distress the research caused in some cases, talking about the plight and experiences of individuals and their hopes for the future highlighted why ethical research is so important. It showed me that research in any area should be undertaken respectfully, with the explicit aim of improving the situation of the populations involved, as summarised by Turton's (1996) assertion that "research into others' suffering can only be justified if alleviating that suffering is the explicit

objective" (Turton 1996, p.96. cited in Jacobsen & Landau, 2003) Whilst this may in some studies be a distant aim, keeping this in mind will nevertheless help to inform the research design and encourage dissemination as widely as possible, including dissemination of results to clinicians and participants. As a result of the additional funding I received for this project I will be providing a summary of results translated into the required languages for participants.

Cross-cultural validation of measures

The second issue is the problem that when conducting research with refugees, few psychological assessment measures have been validated on non-English speaking populations. This presents researchers with the task of adapting measures, demonstrating the cross-cultural equivalence of these and the validity of their results. The central aim of cross-cultural adaptation of a measure, is to reduce the distortion caused to measurement by aspects of culture (Flaherty et al., 1988) and arrive at a measure that is equivalent with the original (Beck, Bernal, & Froman, 2003). Table 12 outlines five aspects of equivalence which are considered in the adaptation of a measure across cultures (Flaherty et al., 1988). Each type of equivalence is discrete which means that an instrument can be cross-culturally equivalent on some but not all levels.

Table 12: Forms of cultural equivalence in the adaptation of measures (From Flaherty et al., 1988)

Content equivalence	The cultural relevance of each item of the instrument.
Semantic equivalence	The meaning of each item is the same in each culture after translation
Technical equivalence	The method of data collection is comparable in each culture (e.g., interview, questionnaire)
Criterion equivalence	Interpretation of the measurement of the concept remains the same when compared with the norm for each culture studied.
Conceptual equivalence	The measure is assessing the same theoretical construct in each culture

The authors of the Harvard Trauma Questionnaire (Mollica et al., 2004) report the method they used to adapt the HTQ into Vietnamese. To ensure semantic equivalence, they report that English versions were translated into Vietnamese by experienced bilingual clinicians and then blind back-translated into English by three bilingual experts knowledgeable of mental health concepts. These versions were then piloted for one year to ensure technical equivalence. Semantic equivalence was then further developed by assessment of the translated measure by language experts, with particular

attention paid to nuance and connotation of the items. Criterion validity was assessed by identifying the degree of sensitivity and specificity of the translated version.

In the current study translating, back-translating and validating measures was not feasible because of the range of different languages spoken by participants which led to time and budgetary constraints. However, care was taken to ensure, as far as possible, cultural equivalence of the measures and concepts. Whilst this was limited because translated measures were not used, the application of the equivalence principles at several stages of the research was nonetheless helpful.

During the initial phase, I selected measures primarily on the basis that they had been used widely across cultures, as this may suggest a degree of conceptual equivalence. I was particularly concerned about the social support questionnaires and whether these would translate across cultures. To compensate for this I included two questionnaires which in total assessed different forms of support, including number of supports, satisfaction with support and perceived support. When administering the measures, I used interpreters who regularly work in the mental health field, which I hoped would ensure some degree of semantic equivalence of the question items. In addition, the administration of the questionnaires was adapted to make it more naturalistic and similar to a clinical assessment. This involved adopting a semi-structured interview style for most sections except for when answering questions with pre-defined categories. In these instances

participants were provided typed and translated versions of the answer categories, and questionnaires were presented in an interview format. To further control for error, results were interpreted with careful reference back to the underlying theory and previous studies. Whilst it is not possible to assess the cultural equivalence of the measures in the current study, the steps taken above should have ensured a degree of equivalence.

Ideally, cross-cultural research should only be undertaken if appropriate, valid and culturally equivalent measures are available. However, this would substantially limit important research with refugees and other minority ethnic groups which could lead to greater marginalisation. Whilst there is a need for large scale, methodologically sound research, there is also a need for smaller scale studies which, conducted with principles of cross-cultural equivalence and good methodology in mind and with careful interpretation of results, can increase understanding, contribute to the evidence base and in turn serve as an impetus for larger scale studies.

Psychology and politics

When working with refugees it is difficult to be politically neutral because of the atrocities they have experienced - usually as a result of state sanctioned action - as well as the further direct impact of asylum policies in host countries. This calls into question the relationship between politics and psychology and the extent to which psychologists have an obligation to contribute to and comment on government policy. Clearly psychologists already contribute to government initiatives, as can be seen in some programmes to support parenting and child development, which are underpinned by psychological theories and research. However, the critical response of psychology in the UK to policy outside of traditional areas appears less obvious. This was highlighted by Roberts and Esgate (2005) who suggest that "British psychology, as represented by the contents of *The Psychologist,* has deliberately adopted a stance in which controversial political issues of the day, no matter how relevant to psychologists, are studiously avoided" (p. 64). Whilst I do not necessarily agree that British psychology as an entity is apolitical - because of the diverse individual contributions of psychologists - the lack of a collective response to political issues may signal that at a societal level, the contribution psychology currently makes to areas aside from mental health is limited.

It has been my experience that psychologists who work with refugees and human rights issues are interested in the political sphere of their work. This was shown during discussions about the research, clinical discussions and

my attendance at meetings of an open group for Psychologists working with Refugees and Asylum Seekers (PSYRAS). I saw this political interest as a response to the types of issues highlighted in the current study - namely that repressive asylum policy may have a direct negative impact on the mental health and overall wellbeing of refugees - and as an aspiration to help inform evidence based policy. It has been suggested that the increasingly punitive legislation such as, the use of detention and cuts to NHS services for failed asylum seekers, are the result of a cycle whereby predominantly negative media coverage of asylum seekers influences popular opinion, which then in turn influences policy (Patel & Mahtani, 2006). This can lead to policy based more on appeasing popular opinion than implementing findings from the evidence base.

An example of this is the all too common implication by government policies and media coverage that asylum seekers are 'flooding' the UK. However, a look at government statistics for the year of 2005, shows that whilst the net immigration into the UK was 185,000, net immigration of asylum seekers and dependents was 11,000, roughly six percent of the total figure (Office for National Statistics, 2006). Although a debate on the social and economic benefits of immigration more generally is beyond the scope of this paper, these figures suggest that contrary to public opinion, refugees and asylum seekers account for only a small fraction of total immigration.

In such an important and politically motivated area, careful interpretation of the evidence base and sound research is required in order to develop

evidence-based policy. Psychologists can contribute to this on several levels including by identifying risk and protective factors for psychological health, commenting on the likely psychological effects of specific policies and by helping to inform decision making on asylum claims by identifying psychological processes that may impede the claim making process, such as the effect of PTSD on memory (e.g. Herlihy, Scragg, & Turner, 2002).

Over the course of my research, my view that psychologists have a set of skills and an understanding of psychological theory that can be used to help develop policy in diverse areas has strengthened. Indeed, as suggested by Summerfield "In addition to what they do for the individual patient, doctors have a wider duty to speak out about the social and political roots of suffering and disease" (Summerfield, 2003, p. 774). Whilst Summerfield's comment may have been intended for physicians it is just as relevant to clinical psychologists and other mental health professionals, suggesting that in addition to developing psychological theories that document the effects of specific familial or individual risk factors for mental health, psychologists also have a duty to speak out on wider government policy and societal trends that the evidence base suggests, may harm wellbeing.

Conclusion

On reflection, conducting this research has greatly developed my understanding of relevant clinical, research and political issues when working with refugees. However, many of the issues are relevant not only to work with refugees, but clinical psychology more generally. Primarily, it has

provided me with a greater understanding of the relationship of the social environment to the wellbeing of vulnerable populations, an understanding of the importance of a strong ethical position in both research and therapy and the importance of considering the contribution psychology may make at levels other than the individual. I look forward to having more opportunities to apply and deepen these understandings throughout my career.

References

Beck, C. T., Bernal, H., & Froman, R. D. (2003). Methods to document semantic equivalence of a translated scale. *Research in Nursing and Health, 26*, 64-73.

Bögner, D. (2005). *What prevents refugees and asylum seekers exposed to violence from disclosing trauma?* Unpublished Doctorate in Clinical Psychology thesis, University College London.

Collogan, L. K., Tuma, F., Dolan-Sewell, R., Borja, S., & Fleischman, A. R. (2004). Ethical Issues Pertaining to Research in the Aftermath of Disaster. *Journal of Traumatic Stress, 17*, 363-372.

Dyregrov, K., Dyregrov, A., & Raundalen, M. (2000). Refugee families' experience of research participation. *Journal of Traumatic Stress, 13*, 413-426.

Fisher, C. B., Hoagwood, K., Boyce, C., Duster, T., Frank, D. A., Grisso, T., et al. (2002). Research ethics for mental health science involving

ethnic minority children and youths. *American Psychologist, 57*, 1024-1040.

Flaherty, J. A., Gaviria, F. M., Pathak, D., Mitchell, T., Wintrob, R., Richman, J., et al. (1988). Developing instruments for cross-cultural psychiatric research. *Journal of Nervous and Mental Disease, 176*, 257-263.

Griffin, M. G., Resick, P. A., Waldrop, A. E., & Mechanic, M. B. (2003). Participation in trauma research: Is there evidence of harm? *Journal of Traumatic Stress, 16*, 221-227.

Herlihy, J., Scragg, P., & Turner, S. (2002). Discrepancies in autobiographical memories--Implications for the assessment of asylum seekers: Repeated interviews study. *BMJ, 324*, 324-327.

Jacobsen, K., & Landau, L. B. (2003). The dual imperative in refugee research: some methodological and ethical considerations in social science research on forced migration. *Disasters, 27*, 185-206.

Kassam-Adams, N., & Newman, E. (2002). The reactions to research participation questionnaires for children and for parents (RRPQ-C and RRPQ-P). *General Hospital Psychiatry, 24*, 336-342.

Mollica, R. F., McDonald, L. S., Massagli, M. P., & Silove, D. M. (2004). *Measuring Trauma, Measuring Torture - Instructions and guidance on the utilization of the Harvard program in refugee trauma's versions of the Hopkins Symptom Checklist (HSCL-25) & The Harvard Trauma Questionnaire (HTQ)*. Cambridge MA: Harvard Program in refugee Trauma.

Newman, E., Walker, E. A., & Gefland, A. (1999). Assessing the ethical costs and benefits of trauma-focused research. *General Hospital Psychiatry, 21*, 187-196.

Office for National Statistics. (2006). *Over 500 a day gained through migration to the UK*. London: National Statistics.

Patel, N., & Mahtani, A. (2006). The politics of working with refugee survivors of troture. *The Psychologist, 20*, 164-166.

Roberts, R., & Esgate, A. (2005). Don't mention the war. *The Psychologist, 18*, 64.

Summerfield, D. (2003). Fighting "terrorism" with torture. *BMJ, 326*, 773-774.

Walker, E. A., Newman, E., Koss, M., & Bernstein, D. (1997). Does the study of victimization revictimize the victims? *General Hospital Psychiatry, 19*, 403-410.

Appendix 1: Study information sheet and consent form

SUB-DEPARTMENT OF CLINICAL HEALTH PSYCHOLOGY
UCL PSYCHOLOGY

Participant information sheet (survey) version 2 (07.05.2006)

Pre & post-migratory factors and mental wellbeing in refugees

Part 1

You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve.

- Part 1 tells you the purpose of this study and what will happen to you if you take part.
- Part 2 gives you more detailed information about the conduct of the study.

Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

What is the purpose of the study?

The aim of this project is to investigate how experiences before and after migration affect the psychological wellbeing of refugees and asylum seekers who are now in the UK. The study is being completed as part of a Doctorate in Clinical Psychology course.

Why have I been chosen?

You have been chosen as you are attending a service where the research is being conducted. We will be involving around 60 refugees and asylum seekers from different organisations in this study.

Do I have to take part?

No. Participation in the study is voluntary and it is up to you to decide whether nor not to take part. You are free to withdraw from the study at any time and without giving a reason. A decision to withdraw at any time, or a decision not to take part, will not affect any care you receive or will it influence your asylum application or asylum status in any way.

What will happen to me if I take part?

You will be asked to attend for an interview lasting between 30 minutes and 1 hour. Participants will be asked about their experiences in their home country and since arrival in the UK. Some questions will ask about the experience of

trauma. You may also be asked for access to your medical notes to clarify some information (e.g., arrival date in the UK, asylum status). The researcher will explain to you what information they need to get from your medical notes. The results of the study will be published in a scientific or medical journal.

Expenses and payments:
A small reimbursement in recognition of your time and to cover any travel expenses will be available.

What are the risks and discomfort?
Some people might find it difficult to think about these issues and may feel upset thinking about traumatic experiences. If the interviewer thinks there are any psychological, health or risk related issues he will contact the person's caseworker or GP to discuss how to address them.

What are the potential benefits?
We cannot promise the study will help you in any way, but the information we get may help us plan services to meet the needs of other refugees and asylum seekers in similar situations.

What if there is a problem?
Any complaint about the way you have been dealt with during the study or any possible harm you might suffer will be addressed. The detailed information on this is given in Part 2.

Will my taking part be kept confidential?
Yes. All information which is collected about you during the course of the research will be kept confidential. Any information about you will have your name and address removed so that you cannot be recognised from it. Only the researchers will have access to the data collected during this study.

Contact details:
If you have any comments or concerns you should discuss these with the Principal Researcher, **Ken Carswell on TEL NO.**

Part 2

What if there is a problem or I would like to make a complaint?
If you have a concern about any aspect of this study you can speak with the lead researcher (Ken Carswell) using the contact details above, or someone at the service where the research took place. If you remain unhappy and wish to complain formally, you can do so through the NHS complaints procedure. Details can be obtained from the service where the research took place. Alternatively you can contact the research sponsor, UCL Biomedicine Research & Development Unit. The contact person is Oke Avwenagha, who can be reached by mail: Biomedicine R&D Unit, Room G652, Medical School Admin corridor, Royal Free and University College Medical School – Hampstead Campus, Rowland Hill Street, London, NW3 2PF, or by telephone 0207 794 6392.

What happens if I am harmed in some way by the research?

If you are harmed by taking part in this research project, University College London has non-negligent ("no-fault") indemnity arrangements in place. If you are harmed due to someone's negligence, then you may have grounds for a legal action for compensation, but you may have to pay for it. If you feel you have been harmed in some way by the study please contact the service where the research was conducted for further information, or the UCL Biomedicine Research & Development Unit using the contact details given above.

What will happen to the results of the study?
The results of the study will be written up as a thesis and published in medical or psychology journals. If you would like a copy of the results please inform the researcher.

Who is organising the research?
The research is being conducted by Ken Carswell a student on the Doctorate in Clinical Psychology course at University College London.

Who has reviewed the study?
This study received a favourable ethical opinion from the London Multi-Research Ethics-Committee (MREC).

You will be provided with a copy of the information sheet and consent form to keep. Thank you very much for taking part in this study

SUB-DEPARTMENT OF CLINICAL HEALTH PSYCHOLOGY
UCL PSYCHOLOGY

Participant consent form (survey) version 1 (19.03.2006)

Pre & post-migratory factors and mental wellbeing in refugees

Please tick the following:

I have read/been read and understand the information sheet provided for the above study.

I have had the opportunity to ask questions and discuss this project, and have received satisfactory answers to all my questions.

I understand that participation is voluntary, and that I can withdraw at any time without giving a reason and this will not affect my access to present or future services or treatment, or my asylum application.

I understand that the information I give is confidential and will only be seen by the research team.

I understand that my medical notes may be accessed for further information. I understand that the reason for this will be explained to me and I am free to decline access.

I agree to take part in this study

Signature (participant)

.....

Name printed

.....

Signature (researcher)

.....

Name printed

.....

Date

.....

Many thanks for your help with this project

Appendix 2: Letter of ethical approval

NHS
London MREC
The Old Refectory
Central Middlesex Hospital
Acton Lane
London
NW10 7NS

Telephone:

08 June 2006

Mr Kenneth Carswell
Trainee Clinical Psychologist
Sub-Department of Clinical Health Psychology
University College London
Gower Street
London WC1E 6BT

Dear Mr Carswell

Full title of study: **The relationship between post-migratory factors and mental wellbeing in refugees and asylum seekers**

REC reference number:

Thank you for your letter of 12 May 2006, responding to the Committee's request for further information on the above research and submitting revised documentation

The further information was considered by the Vice Chairman, in consultation with two members .

Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised.

Ethical review of research sites

The Committee has designated this study as exempt from site-specific assessment (SSA. There is no requirement for [other] Local Research Ethics Committees to be informed or for site-specific assessment to be carried out at each site.

Conditions of approval

The favourable opinion is given provided that you comply with the conditions set out in the attached document. You are advised to study the conditions carefully.

Approved documents

The final list of documents reviewed and approved by the Committee is as follows:

Document	*Version*	*Date*
Application	1	20 March 2006
Investigator CV	CV for Kenneth Carswell	19 March 2006
Investigator CV	CV for Dr Chris Barker	19 March 2006
Protocol	3	19 March 2006
Covering Letter		20 March 2006
Letter from Sponsor	Letter to Mr Carswell from Dr Awwenagha	21 February 2006
Peer Review	Email to Mr Carswell from Mr Brewin	23 December 2005
Peer Review	Review by Chris Brewin	01 November 2005
Interview Schedules/Topic Guides	Qualitative Interview Schedule Version 1	

Questionnaire	Clinical Outcomes in Routine Evaluation (CORE)	
Questionnaire	The Posttraumatic Diagnostic Scale (PDS)	
Questionnaire	Short Form Social Support Questionnaire (SSQ6)	
Questionnaire	MSPSS	
Questionnaire	War Trauma Questionnaire (WTO)	
Questionnaire	Post-Migratory Questionnaire	
Letter of invitation to participant	1	19 March 2006
Letter of invitation to participant	2	07 May 2006
Participant Information Sheet: Participant Information Sheet - Qualitative	2	07 May 2006
Participant Information Sheet: Participant Information Sheet - Survey	2	07 May 2006
Participant Consent Form	Qualitative	19 March 2006
Participant Consent Form	Survey Version 1	19 March 2006
Response to Request for Further Information	Letter to Dr Steiner from Mr Carswell	12 May 2006
Letter to Mr Carswell from Mr Wilson re: UCL Non-Negligent Harm Insurance		23 February 2006
Letter to Mr Carswell from Mr Barker and Ms Curl re: Funding		05 January 2006

Research governance approval

You should arrange for the R&D department at all relevant NHS care organisations to be notified that the research will be taking place, and provide a copy of the REC application, the protocol and this letter.

All researchers and research collaborators who will be participating in the research must obtain final research governance approval before commencing any research procedures. Where a substantive contract is not held with the care organisation, it may be necessary for an honorary contract to be issued before approval for the research can be given.

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

Please quote this number on all correspondence

With the Committee's best wishes for the success of this project

Yours sincerely

Dr John W Keen
Vice Chairman

Email: louise.braley@nwlh.nhs.uk

Appendix 3: Harvard Trauma Questionnaire

(Mollica et al., 1992; Mollica, McDonald, Massagli, & Silove, 2004)

Categories of traumatic events

Category	Items
Bodily injury, Forced confinement and coercion, Forced harm to others	Beating to the body Rape Other types of sexual abuse or sexual humiliation Knifing or axing Torture Serious physical injury from combat situation or landmine Imprisonment Forced labour Extortion or robbery Brainwashing Kidnapped Other forced separation from family members Forced to find and bury bodies Enforced isolation from others Forced to desecrate or destroy the bodies or graves of deceased persons Prevented from burying someone Someone was forced to betray you and place you at risk of death or injury Forced to physically harm family member, or friend Forced to physically harm someone who is not family or friend Forced to destroy someone else's property or possessions Forced to betray family member, or friend placing them at of death or injury Forced to betray someone who is not family or friend placing them at risk of death or injury Witnessing torture

Categories of trauma cont.

War-like conditions & witnessing violence	Lack of shelter Lack of food or water Ill health without access to medical care Confiscation or destruction of personal property Combat situation (e.g., shelling and grenade attacks) Forced evacuation under dangerous conditions Witness beatings to head or body Forced to hide
Disappearance death, or injury of loved ones	Murder, or death due to violence, of spouse Murder, or death due to violence, of child Murder, or death due to violence, of other family member or friend Disappearance or kidnapping of spouse Disappearance or kidnapping of child Disappearance or kidnapping of other family member or friend Serious physical injury of family member or friend due to, combat situation or landmine

Harvard Trauma Questionnaire

INSTRUCTIONS

We would like to ask you about your past history and present symptoms. This information will be used to help us provide you with better medical care. However, you may find some questions upsetting. If so, please feel free not to answer. This will certainly not affect your treatment. The answer to the questions will be kept confidential.

PART 1: TRAUMA EVENTS

Please indicate whether you have experienced any of the following events (check YES or NO)

		YES	NO
1.	Lack of shelter		
2.	Lack of food or water		
3.	Ill health without access to medical care		
4.	Confiscation or destruction of personal property		
5.	Combat situation (e.g., shelling and grenade attacks)		

6.	Forced evacuation under dangerous conditions		
7.	Beating to the body		
8.	Rape		
9	Other types of sexual abuse or sexual humiliation		
10.	Knifing or axing		
11.	Torture, i.e., while in captivity you received deliberate and systematic infliction of physical or mental suffering		
12.	Serious physical injury from combat situation or landmine		
13.	Imprisonment		
14.	Forced labor (like animal or slave)		
15.	Extortion or robbery		
16.	Brainwashing		
17.	Forced to hide		
18.	Kidnapped		
19.	Other forced separation from family members		
20.	Forced to find and bury bodies		
21.	Enforced isolation from others		
22.	Someone was forced to betray you and place you at risk of death or injury		
23.	Prevented from burying someone		
24.	Forced to desecrate or destroy the bodies or graves of deceased persons		
25.	Forced to physically harm family member, or friend		

		YES	**NO**
26.	Forced to physically harm someone who is not family or friend		
27.	Forced to destroy someone else's property or possessions		
28.	Forced to betray family member, or friend placing them at risk of death or injury		
29.	Forced to betray someone who is not family or friend placing them at risk of death or injury		
30.	Murder, or death due to violence, of spouse		
31.	Murder, or death due to violence, of child		
32.	Murder, or death due to violence, of other family member or friend		
33.	Disappearance or kidnapping of spouse		
34.	Disappearance or kidnapping of child		
35.	Disappearance or kidnapping of other family member or friend		
36.	Serious physical injury of family member or friend due to combat situation or landmine		
37.	Witness beatings to head or body		

38.	Witness torture		

PART 4: TRAUMA SYMPTOMS

The following are symptoms that people sometimes have after experiencing hurtful or terrifying events in their lives. Please read each one carefully and decide how much the symptoms bothered you <u>in the past week</u>.

		(1) Not at all	(2) A little	(3) Quite a bit	(4) Extre-mely
1.	Recurrent thoughts or memories of the most hurtful or terrifying events				
2.	Feeling as though the event is happening again				
3.	Recurrent nightmares				
4.	Feeling detached or withdrawn from people				
5.	Unable to feel emotions				
6.	Feeling jumpy, easily startled				
7.	Difficulty concentrating				
8.	Trouble sleeping				
9.	Feeling on guard				

		(1) Not at all	(2) A little	(3) Quite a bit	(4) Extrem-ely
10.	Feeling irritable or having outbursts of anger				
11.	Avoiding activities that remind you of the traumatic or hurtful event				
12.	Inability to remember parts of the most hurtful or traumatic events				
13.	Less interest in daily activities				

14.	Feeling as if you don't have a future				

15.	Avoiding thoughts or feelings associated with the traumatic or hurtful events				
16.	Sudden emotional or physical reaction when reminded of the most hurtful or traumatic events				
17.	Feeling that you have less skills than you had before				
18.	Having difficulty dealing with new situations				
19.	Feeling exhausted				
20.	Bodily pain				
21.	Troubled by physical problem(s)				
22.	Poor memory				
23.	Finding out or being told by other people that you have done something that you cannot remember				
24.	Difficulty paying attention				
25.	Feeling as if you are split into two people and one of you is watching what the other is doing				
26.	Feeling unable to make daily plans				
27.	Blaming yourself for things that have happened				
28.	Feeling guilty for having survived.				
29.	Hopelessness				
30.	Feeling ashamed of the hurtful or traumatic events that have happened to you				
31.	Feeling that people do not understand what happened to you				
32.	Feeling others are hostile to you				

33.	Feeling that you have no one to rely upon				
34.	Feeling that someone you trusted betrayed you				
35.	Feeling humiliated by your experience.				
36.	Feeling no trust in others.				
37.	Feeling powerless to help others.				

38.	Spending time thinking why these events happened to you				
39.	Feeling that you are the only one that suffered these events.				
40.	Feeling a need for revenge.				

Torture History

Now I would like to ask you about events that many people consider torture. I will ask you whether an event occurred. Please answer yes or no.

Event	YES	NO
1. Beating, kicking, striking with objects		
2. Threats, humiliation		
3. Being chained or tied to others		
4. Exposed to heat, sun, strong light		
5. Exposed to rain, body immersion, cold		
6. Placed in a sack, box, or very small space		
7. Drowning, submersion of head in water		
8. Suffocation		
9. Overexertion, hard labor		
10. Exposed to unhygienic conditions conducive to infections or other diseases		
11. Blindfolding		
12. Isolation, solitary confinement. If yes, how many		
13. Mock execution		
14. Made to witness others being tortured		
15. Starvation		
16. Sleep deprivation		
17. Suspension from a rod by hands and feet		
18. Rape, mutilation of genitalia		
19. Burning		
20. Beating the soles of the feet with rods		
21. Blows to the ears		
22. Forced standing		
23. Throwing urine or feces at victim or being made to throw it at other prisoners		
24. Medicine administration (non-therapeutic)		
25. Needles under toes or fingernails		
26. Writing confessions numerous times		
27. Shocked repeatedly by electric instrument		

Appendix 4: Hopkins Symptom Checklist – 25

(Mollica et al., 2004; Mollica, Wyshak, de Marneffe, Khuon, & Lavelle, 1987)

Hopkins Symptom Checklist - 25

INSTRUCTIONS

Listed below are symptoms or problems that people sometimes have. Please read each one carefully and describe how much the symptoms bothered you or distressed you in the last week, including today. Place a check in the appropriate column.

	PART I ANXIETY SYMPTOMS	Not at all	A little	Quite a bit	Extrem-ely
1.	Suddenly scared for no reason				
2.	Feeling fearful				
3.	Faintness, dizziness or weakness				
4.	Nervousness or shakiness inside				
5.	Heart pounding or racing				
6.	Trembling				
7.	Feeling tense or Keyed up				
8.	Headaches				
9.	Spell of terror or panic				
10.	Feeling restless or can't sit still				

	PART II DEPRESSION SYMPTOMS	Not at all	A little	Quite a bit	Extrem-ely
11.	Feeling low in energy, slowed down				
12.	Blaming yourself for things				
13.	Crying easily				
14.	Loss of sexual interest or pleasure				
15.	Poor appetite				
16.	Difficulty falling asleep, staying asleep				
17.	Feeling hopeless about future				
18.	Feeling blue				
19.	Feeling lonely				
20.	Thought of ending your life				
21.	Feeling of being trapped or caught				
22.	Worry too much about things				
23.	Feeling no interest in things				
24.	Feeling everything is an effort				
25.	Feeling of worthlessness				

Appendix 5: EuroQol 5D

(Kind, Dolan, Gudex, & Williams, 1998)

EuroQol 5D

Your own health state today

By placing a tick in one box in each group below, please indicate which statement best describes your own health state today.

Do not tick more than one box in each group.

Mobility

I have no problems in walking about ☐
I have some problems in walking about ☐
I am confined to bed ☐

Self-Care

I have no problems with self-care ☐
I have some problems washing and dressing myself ☐
I am unable to wash or dress myself ☐

Usual Activities (eg. work, study, housework, family or leisure activities)

I have no problems with performing my usual activities ☐
I have some problems with performing my usual activities ☐
I am unable to perform my usual activities ☐

Pain/Discomfort

I have no pain or discomfort ☐
I have moderate pain or discomfort ☐
I have extreme pain or discomfort ☐

Anxiety/Depression

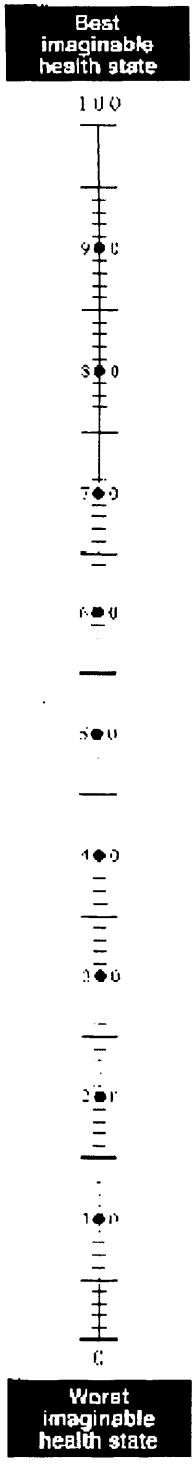
I am not anxious or depressed ☐
I am moderately anxious or depressed ☐
I am extremely anxious or depressed ☐

Your own health state today

To help people say how good or bad a health state is, we have drawn a scale (rather like a thermometer) on which the best state you can imagine is marked 100 and the worst state you can imagine is marked 0.

We would like you to indicate on this scale how good or bad your own health is today, in your opinion. Please do this by drawing a line from the box below to whichever point on the scale indicates how good or bad your health state is.

Your own health state today



Appendix 6: Demographic and Post-Migration Difficulties Questionnaire

(Steel et al., 1999)

Categories of post migration problems

Residency determination	Fears of being sent home Uncertainty about residency* Conflict with immigration officials No permission to work
Health care, welfare and asylum	Poor access to healthcare Poor access to counselling services Poor access to an interpreter in primary care settings* Delays in processing your application
Threat to family	Separation from family Worries about family back at home
Adaptation difficulties	Not being able to find work Physical or verbal abuse* Bad job conditions Lack of money (poverty) Housing problems* Uncertainty about the future*
Loss of culture and support	Boredom Isolation Low social contacts* Poor access to the foods that you like

* Problem not in original questionnaire

Demographic and Post-Migration Difficulties Questionnaire

-99 : Not applicable
-88: Don't know/not recorded

Demographics

First I would like to ask you some questions about yourself and your background:

1. Sex: M_1 F_2

2. Age: _____ -88

3. DOB:

4. Marital status:

1 Single	4 Divorced / Separated
2 Living together	5 Married
3 Widowed	6 Other:_____
-88 Don't know	

5. Are you geographically separated from your spouse or partner? N_0 Y_1 -88 -99

6. How many children do you have? _____ -88

7. How old are they? _____ -88 -99

8. What is your country of origin: _____ -88

9. What is your ethnic background **(always ask)**:

1	Albanian	7	Kurdish
2	Bosnian	8	Russian
3	Croatian	9	Somali
4	Iranian	10	Turkish
5	Iraqi	11	Other _____
6	Kosovan Albanian	12	Unknown _____
-88	Not recorded		

10. What schooling did you complete?

1. Did not attend school
2. Less than primary
3. Primary school
4. Secondary school
5. College
6. University

-88 Not recorded

11. **(ask if 9 is unclear)** What age did you finish your education? _____ -88 -99

12. What was your occupation before leaving your home country?_____

1	Professional	5	Student
2	Managerial/Technical	6	Other
3	Skilled	-88	Not recorded
4	Unskilled		

13. Do you currently work or study? N Y -88

14. What do you work as/study?_____

1	Professional	5	Student
2	Managerial/Technical	6	Other
3	Skilled	-88	Not recorded
4	Unskilled		

15. How many hours a week do you work or study?_____ -88

16. What language do you speak at home?_____ -88

Asylum information

Now I'd like to ask you some questions about your asylum or refugee status

17. When did you arrive in the UK? _____ -88

18. What is your status in the UK?

1	Asylum seeker no first decision	7	Full Refugee Status (ILR)
2	Case Refused in appeal	8	Refused no further appeals

	System		
3	Exceptional Leave to Remain (ELR)	9	Programme Refugee
4	Leave expired, awaiting decision	10	Unsure
5	Humanitarian Protection (HP)	11	Other
6	Discretionary Leave to Remain (DL)	12	Have ILR awaiting citizenship
-88	Not recorded		

Asylum application information

When did you apply for asylum? Date_____ -88

When did you receive your first decision?

Date_____ -88 -99

When did you receive your granting of first type of leave _____ -88 -99

19. Number of months application to present _____ -88

20. Number of months between application and first decision _____ -88 -99

21. Number of months from application to granting of leave_____ -88 -99

22. Number of months from granting leave until present _____ - 88 -99

23. (if still applying/no ILR) Length of time from application to present: _____ -88 -99

IF ASYLUM SEEKER ASK:

24. Are you receiving support from NASS?
1 Accommodation only
2 Accommodation and subsistence
3 Accommodation and vouchers
4 Not eligible
-88
-99

25. Why are you not receiving support from NASS? _____-88 -99

If have children:

26. Are you geographically separated from some or all of your children? N Y -88 -99

IF UNACCOMPANIED MINOR (AGED OVER 18) ASK 8 & 9

27. Are you geographically separated from your parents? N Y -88 -99

28. Are you geographically separated from your siblings? N Y -88 -99

Detention

I'd now like to ask you some questions about being detained or in prison

29. Have you ever been in detention in the UK? N Y -88

30. When was it? _____ -88 -99

31. How long for? _____ -88 -99

32. Where were you detained? Prison$_1$ Immigration detention centre$_2$ Other$_3$ -88 -99

33. Have you been held in detention or in a refugee camp in any other Country N Y -88

Country	Length of Time	What sort of Place was this (eg: Detention / Refugee Camp / Political Prison / Prison)

Finance

I'd now like to ask you some questions about your finances. If you would rather not say, then please tell me

34. What is your main source of income for yourself/your household?

1. Work
2. Benefits

3. Charitable support only
4. Vouchers
5. NASS
6. Other _____

35. What benefits are you receiving? _____ -88 -99

36. (**If you are comfortable saying)** What is your household weekly income _____
-88 Not recorded
-9 Rather not say

37. Is any of this money used for people outside of the household? If so what percentage? _____

38. All things considered, how satisfied or dissatisfied are you with your standard of living?*

1	Very dissatisfied	5	A little satisfied
2	Dissatisfied	6	Satisfied
3	A little dissatisfied	7	Very satisfied
4	Not satisfied or dissatisfied	8	Don't know
-88	Not recorded		

39. Do you ever not have enough money to afford the kind of food or clothing you/your family should have?* N Y -88

40. How often does this happen?

1	Always	4	Seldom
2	Often	5	Don't know
3	Sometimes	-88	Not recorded
-99	Not applicable		

Housing

Now some questions about housing

41. What type of home do you live in?

1	Own/family house	4	Bedsit
2	Own/family flat	6	Hotel/B&B
3	Shared household	7	No home
8	/sleep on floor	9	Don't know
10	Other	-88	Not recorded

42. Is your home rented or owned?

1	Owned	4	Live in house for free
2	Private rent	6	Don't know
3	NASS/local authority	-88	Not recorded

43. how many bedrooms does your home have? _____ -88

44. How many people including children live in your household?_____ -88

Experience in the UK

45. In the following situations, how well do you feel you would be able to communicate in English?**

		Not at all$_1$	A little$_2$	Fairly well$_3$	Very well/No Difficulty$_4$
A	When travelling around London or the UK (e.g., to see friends, relatives, or to attend interviews)				
B	Discussing your situation with social services or other professionals				
C	Attending an English-speaking doctor				

46. Have you ever received any form of psychological therapy or counselling?
N Y -88

When was this: _____

Where was this? _____

How long was it for? _____

How frequently? _____

46. Estimated number of weeks receiving therapy_____ -88 -99

47. During the last 12 months have any of these difficulties been a problem for you in the UK?

	Not applicable$_{99}$	No problem at all$_0$	A bit of a problem$_1$	Moderately Serious$_2$	A serious Problem$_3$	A very serious problem$_4$
Separation from family.						
Worries about family back at home.						
Uncertainty about the future						
Uncertainty about residency						
No permission to work						
Not being able to find work.						
Unable to work						
Bad job conditions.						
Delays in processing your application.						
Conflict with immigration officials.						
Fears of being sent home.						
Poor access to healthcare						
*Poor access to counselling services.						
*Poor access to an interpreter in primary care settings						
Housing problems						
Lack of money (poverty)						
Boredom						
Isolation						
*Low social contacts						

	Not applicable$_{99}$	No problem at all$_0$	A bit of a problem$_1$	Moderately Serious$_2$	A serious Problem$_3$	A very serious problem$_4$
Verbal abuse from someone of a different ethnic group						
Physical abuse from someone of a different ethnic group						
Verbal abuse from someone of the same ethnic group						
Physical abuse from someone of the same ethnic group						
Abusive or insulting comments or remarks from professionals. Who?_____						
*Poor access to the foods you like.						

* From Whitehall II study (scoring method simplified)
+ From Davis et al
= Additional question
** questions adapted following TSC discussions.

Appendix 7: Short Form Social Support Questionnaire

Short Form Social Support Questionnaire
(Sarason, Sarason, Shearin, & Pierce, 1987)

Instructions
The following questions ask about people in your environment who provide you with help or support. Each question has two parts. For the first part, list all the people you know, excluding yourself, whom you can count on for help or support in the manner described. Give each person's initials and their relationship to you (see example). Do not list more than one person next to each of the numbers beneath each question. Do not list more than nine people per question.

For the second part, using the scale below, circle how satisfied you are with the overall support you have.

6	5	4	3	2	1
Very Satisfied	Fairly satisfied	A little satisfied	A little dissatisfied	Fairly dissatisfied	Very dissatisfied

If you have no support for a question, tick the words 'No one', but still rate your level of satisfaction. The example below has been completed to help you. All your responses will be kept confidential.

Example
Who do you know whom you can trust with information that could get you into trouble?

a)	No-one	3) ASS (friend)		6)		9)	
	1) TEN (brother)	4) PEN (Father)		7)			
	2) LM (friend)	5) LM (employer)		8)			
b)	How satisfied?	6	5	4 √	3	2	1

1) Whom can you really count on to distract you from your worries when you feel under stress?

a)	No-one	3)		6)		9)	
	1)	4)		7)			
	2)	5)		8)			
b)	How satisfied?	6	5	4	3	2	1

2) Whom can you really count on to help you feel more relaxed when you are under pressure or tense?

a)	No-one	3)		6)		9)	
	1)	4)		7)			
	2)	5)		8)			
b)	How satisfied?	6	5	4	3	2	1

3) Who accepts you totally, including both your worst and best points?

a)	No-one	3)		6)		9)	
	1)	4)		7)			
	2)	5)		8)			
b)	How satisfied?	6	5	4	3	2	1

4) Whom can you really count on to care about you, regardless of what is happening to you?

a)	No-one	3)		6)		9)	
	1)	4)		7)			
	2)	5)		8)			
b)	How satisfied?	6	5	4	3	2	1

5) Whom can you really count on to help you feel better when you are feeling ' generally down-in-the-dumps?

a)	No-one	3)		6)		9)	
	1)	4)		7)			
	2)	5)		8)			
b)	How satisfied?	6	5	4	3	2	1

6) Whom can you count on to console you when you are very upset?

a)	No-one	3)		6)		9)	
	1)	4)		7)			
	2)	5)		8)			
b)	How satisfied?	6	5	4	3	2	1

Appendix 8: Duke-UNC Functional Social Support Questionnaire

Duke-UNC Functional Social Support Questionnaire

(Broadhead, Gehlbach, de Gruy, & Kaplan, 1988)

Here is a list of some things that other people do for us or give us that may be helpful or supportive. Please read each statement carefully and place a check (√) in the blank that is closest to your situation.

Here is an example:

I get....

	As much as I would like			Much less than I would like		
Enough vacation time.....	.	.	. √	.	.	.

If you put a check where we have, it means than you get almost as much vacation time as you would like, but not quite as much as you would like.

Answer each item as best you can. There is no right or wrong answers.

Appendix 8

I get.....	As much as I would like	Much less than I would like
1. People who care what happens to me.....	. . . . .	.
2. Love and affection.....	. . . . .	.
3. Chances to talk to someone about problems at work or with my housework.....	. . . . .	.
4. Chances to talk to someone I trust about my personal and family problems.....	. . . . .	.
5. Chances to talk about money matters.....	. . . . .	.
6. Invitations to go out and do things with other people.....	. . . . .	.
7. Useful advice about important things in life.....	. . . . .	.
8. Help when I'm sick in bed.....	. . . . .	.

Appendix 9: Reactions To Research Participation Questionnaire

people feel about being in studies like this one. We REALLY want to l
your opinions, even if there were things you did not like.

	Strongly Disagree	Disagree	Maybe (in the middle)	Agree	S
1. Being in this study was boring.	1	2	3	4	
2. I am glad I was in this study.	1	2	3	4	
3. it was my choice to be in the study. (I could have said no even if other people wanted me to say yes).	1	2	3	4	
4. Being in this study made me feel upset or sad.	1	2	3	4	
5. The things I said will stay private (no one else will know I said them)	1	2	3	4	
6. I am sorry I was in this study	1	2	3	4	
7. Being in this study made me feel good about myself	1	2	3	4	
8. I was told the truth about the study before it started	1	2	3	4	
9. I feel good about helping others by being in this study	1	2	3	4	
10. I knew I could skip questions or parts of the study if I wanted to.	1	2	3	4	
11. I knew I could stop at any time	1	2	3	4	
12. I knew I could ask to take a break whenever I wanted to	1	2	3	4	

ANY OTHER COMMENTS OR SUGGESTIONS?