

# **Mental Health and Well-Being of Somalis in the United Kingdom**

**Thesis submitted as part fulfillment of degree of  
Doctor of Clinical Psychology to Department of Psychology,  
University of Sheffield**

**David Woods**

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## **Declaration**

I declare that the content of this thesis is original and this work has not been submitted to any other institution, or for any other qualification.

## **Abstract**

### **Literature review**

Somalis are a large minority within the UK. The majority of whom are refugees following recent violent conflict in Somalia. Somali migrants are subject to a range of pre- and post-migration stressors that are implicated in poor psychological outcome. Coping strategies may include support from family, the Muslim faith, and use of the drug khat. A significant number of the Somali community may be suffering psychological distress, however, acculturation has reduced the reliance on traditional methods of healing and support. Existing services are not adequately meeting their needs, and a more culturally sensitive service provision is required.

### **Research Report**

The study investigates psychological and other factors related to khat use and mental health within a community sample of 220 Somalis in a UK city. The study employed a cross-sectional design.

Older age, living alone, moving to England as an asylum seeker, separation from family, and loss of occupational status were related to increased levels of anxiety and depression symptoms. Levels of exposure to trauma among the sample were high. Khat use was widespread amongst male respondents, and was associated with a number of negative life events. Trauma, social exclusion, social support, and use of khat were all independently related to increased levels of anxiety and depression and PTSD scores. Economic exclusion was also related to anxiety and depression scores. Clinical implications of the study are discussed.

### **Critical Appraisal**

The process of conducting the research is commented upon, in a reflective and critical manner.

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## Word Counts

Abstract	245	words
Literature review	7,985	
Research report	11,988	
Critical appraisal	3,004	
Total	<b>23,222</b>	



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# Issues relevant to the mental health of Somalis living in the UK. A review of literature.

## **Abstract**

Background Somalis are a large minority within the UK. The majority of whom are refugees following recent violent conflict in Somalia.

Aims To explore the literature relating to the influence of Somali culture and the experience of Somali migrants in the UK on mental health within this community.

Method A review of literature concerning Somali migrants and their mental health, as well as literature relating to mental health in other refugee populations.

Results Somali migrants are subject to a range of pre- and post-migration stressors that are implicated in poor psychological outcome. Coping strategies may include support from family, the Muslim faith, and use of the drug khat. Acculturation has reduced the reliance on traditional methods of healing and support.

Conclusions Somali migrants are at risk of suffering emotional distress due to a range of pre- and post-migration factors. Existing services are not adequately meeting their needs, and a more culturally sensitive service provision is required.

Declaration of interest None declared

Keywords Refugees, trauma, cross-cultural, services, African.

## **Introduction**

Somalis are a large, but often silent, minority within the UK, and other Western countries. There has been a long history of Somali settlement in the UK, and many Somalis have entered more recently as refugees. This review considers literature relating to mental health within the Somali community in the UK.

The focus of this review is on the unique influence of Somali culture and the experience of Somali migrants on mental health. A small amount of literature exists which explores these factors within Somalis. However, the lack of published research in some areas has necessitated consideration of a much wider body of literature relating to the mental health of refugees. Much of the refugee research implicitly assumes a high degree of common experience: for example, a number of studies have looked at correlates of psychological distress amongst refugees as a whole, with no differentiation being made between different ethnic identities (e.g. Lie, 2002). However, the process of migration is extremely heterogeneous, with different individuals and communities facing very different experiences before and after migration (Bhugra, 2004), and cultural influences on individuals' experiences of their well-being and on appropriate interventions cannot be under-estimated. Therefore care must be exercised in generalizing findings from the more general refugee literature to Somalis within the UK.

## **Search strategy**

A number of strategies were used to access review material:

- Computer searches of Web of Science and PubMed search engines, including PsychInfo.
- Consultation with members of local Somali community groups.
- World Wide Web searches.

- Examination of literature cited in these publications.

The search focused on literature concerning Somali migrants and their mental health, but literature relating to mental health in wider refugee populations was also considered given the lack of published literature relating directly to Somali migrants. Keywords used include Somali, Somalia, mental health, psychology, psychiatry, wellbeing, well-being, distress, stress, khat, qat, chat, refugee and migrant.

## **Review**

The review begins with a discussion of the political and human rights situation in Somalia, the history of migration, and demographic information. Mental health is then considered from a Somali cultural viewpoint. Factors relating to mental health amongst the Somali community are then considered, along with evidence concerning the levels of psychological morbidity in the UK Somali Community. Finally, use of services and implications for effective and culturally appropriate interventions are discussed.

## **Political and Human Rights situation in Somalia**

Somalia is situated in a region known as the Horn of Africa bordering Kenya, Ethiopia and Djibouti. In mid 2000 the UN estimated the population to be 8,778,000. The vast majority of Somalis speak the Somali language, and almost all are Sunni Muslims. However, the country is divided strongly along clan-based lines, with four major clan families divided into many clans and sub-clans.

Northern Somalia became the British colony of Somaliland in 1884, and Italy colonised the South. In 1960, both regions become independent and merged into present day Somalia. In 1969, the democratically elected Somali government was toppled in a military coup, and a military regime held power until it was ousted in 1991. Somalia has effectively been without a recognised central government since this time.



Political factions across the country have failed to unite and Somalia's recent history has been characterized by violent social conflict, with continuous inter-clan conflict and fighting among warlords for supremacy.

In recent years violations of human rights have been widespread. Menkhaus (2003) described the situation in the period of 1991-1992: "egregious human rights violations occurred in a range of areas. Murder, massacres, rape and targeting of civilians were all widespread practices...Ethnic cleansing campaigns...created massive displacement and suffering. Forced conscription and quasi-enslavement on farms was visited on weak social groups...and scorched earth tactics were employed by retreating militia to render whole communities destitute and vulnerable to famine" (Menkhaus, 2003, p13).

The human rights situation has improved somewhat since the early 1990s, but remains poor with continuing serious human rights abuses (US Department of State Bureau of Democracy, Human Rights and Labour, 2003). The United Nations High Commissioner for Refugees (UNHCR) position paper of January 2004 (UNHCR, 2004) stated "throughout the country human rights violations remain endemic. These include murder, looting and destruction of property, use of child soldiers, kidnapping, discrimination of minorities, torture, unlawful arrest and detention, and denial of due process by local authorities."

Since 1991, schools, universities, libraries and laboratories have been deliberately destroyed, with the result that Somalia's children have not had access to any organized systems of learning (Abdi, 1998). The country has also been severely hit by famine and outbreaks of disease.

## **Patterns of migration to the UK**

Somalis have a long history of settlement in Britain. This first took the form of transient or sojourner seafaring communities emigrating in the early 19<sup>th</sup> century, with apparently little attempt at integration or adaptation made on their part (Griffiths, 1997; Silveira & Allebeck, 2001). There have been many more recent waves of migration from Somalia to Britain. From the 1960s onwards the largely male community was joined by women and children. During the 1980s there was a succession of waves of refugees, often from educated, professional backgrounds, along with post-colonial settlers. From the late 1980s there have been victims of the civil war, often women and young children, and after 1991 those fleeing the collapse of the military regime and the Gulf War (Griffiths, 1997).

Home Office (2004) statistics report that in the year 2003/2004 the top applicant nationality for asylum was Somalia (with 4,585 applicants received). Between 1985 and 2001 34,150 Somali people were granted settlement in the UK (Cole & Robinson, 2002). The Refugee Council (2003) reports that 90% of Somali asylum applicants have been given leave to stay in the UK. Anecdotal evidence (reported by Cole & Robinson, 2002) suggests that out-migrants from Somalia to other European countries, now classified as EU nationals are also moving to the UK.

## **Demographic data**

The 2001 Census of population provides some information about the size of the Somali population. It reports 43,373 individuals born in Somalia living in England and Wales. This information is limited as it does not include individuals who identify themselves as ethnic Somalis but were not born in Somalia, and an ethnic origin question does not provide accurate information due to inadequacies of the categorization (Cole & Robinson, 2002).



Unofficial estimates of the Somali population in the UK are much higher: Robertson (2002) reports an estimate of about 100,000 Somalis, and the Refugee Council (2003) report estimates that well over 150,000 Somalis have entered the UK. Within the UK, London has the largest Somali community; large numbers of Somalis also live in Bristol, Cardiff, Liverpool and Sheffield.

Consultancy Services to the Voluntary and Statutory Sector report that approximately 50% of the Somali Community within the UK are single women and children, with the husbands either killed or detained in Somalia (CVS Consultants, 1999). UK census data for 2001 reports that 58% of the Somali population over the age of 16 is female, and that just 26% of children are living in a 'married couple' or 'cohabiting couple' family.

Levels of employment within the UK Somali community are very low. Census data for 2001 showed, of 16-74 year olds, just 8.6% were employed and 19.3% were students. Bhui et al. (2003) found that 18% of their random community sample in London were employed.

## **Somali concepts of Mental Health**

Western biomedical and biopsychosocial concepts of mental health contrast strongly with views traditionally held by Somalis. CVS Consultants (1999) describe how in Somalia, a person is generally regarded as either 'sane' or 'mad', with no gradation inbetween. Other lower level mental health problems, such as the Western concepts of depression and anxiety-related disorders, may not be regarded as requiring outside help and are dealt with within families.

Bullivant et al. (1995) reported different traditional conceptualizations of mental health and associated 'therapeutic' approaches. They describe how Somalis have commonly viewed mental illness in terms of the spiritual state of the person. Treatment

may include the reading of sections of the Koran by religious leaders, or traditional healing dances and ceremonies aimed at casting out the 'bad spirit' inside. Witchcraft is another way that Somalis have conceptualized mental health problems, necessitating another witch to come and remove the curse, using dance or other ceremonies. Some Somalis see mental illness as a curse put on a whole extended family because family members have not behaved in traditionally, socially, or religiously acceptable ways. The remedy in this case is repentance and asking for forgiveness from Allah or the wronged parties. Some Somalis also view mental illness as a physical condition, and will seek treatment from herbalists and nutritionists.

Rousseau et al. (1998) describes the possession of Somali women by a spirit or *sar*. Women are cured by healers who question the *sar* about the causes of misfortune. The *sar* will express its wishes through the possessed person, and leave once its desires are satisfied. Thus the *sar* may aid the woman in getting her needs met by reversing social pressures so that husbands are responsible for their wife's well-being.

Zarowsky (1997) discussed the experiences of Somali refugees and returnees in eastern Ethiopia, based on anthropological fieldwork with individual refugees and returnees, and the agencies involved in relief and development. The extent to which her findings can be generalised to Somali communities in the West is unclear: Zarowsky notes the importance of context, e.g. the involvement of relief and development agencies, on individual and collective understandings. However, the paper is an important contribution to understandings of the refugee experience for Somalis. Zarowsky discusses the use of emotion words within the Somali language, and comments that "emotion is always embedded in life (p.15)": that is that abstract terms for emotional states are always linked to concrete experiences (e.g. loss of land, love family or livelihood). In exploring the impact of trauma and the experience of being a refugee, she reports that the most salient framework of the 'refugee experience' was



“one of collective suffering framed in terms of history, justice and dispossession, rather than in terms of individual loss or distress (p.12)”. She noted that refugees did not forget past experiences, but framed past and current problems “in terms that provide a meaningful story and framework for action, whether of history and (in)justice, or in reference to stories about Muslim heroes, saints and martyrs, or in other terms that reinforce the sense of community and the meaningful place of an individual in this community and its trajectory (p.16)”.

Two qualitative studies have examined understandings of mental health within Somalis in the UK. Whittaker et al. (in press) used group discussions and individual interviews with young Somali women in Sheffield, and Robertson (2002) drew data from focus groups and key informant interviews with Somali mental health workers and participants from the Somali community. Both studies report very similar themes which will be summarised below.

Whittaker et al. reported the importance of a “get on with it” approach. The appearance of ‘moving on’ and coping was central to understandings of psychological wellbeing, with an importance placed on dealing with emotions quickly, not moaning about problems, but getting on with lives. Robertson reports that mental illness was perceived as a sign of weakness, an inability to cope, or an attempt to gain unwarranted sympathy.

Robertson reports that in the Somali community mental illness, or *waali*, is associated with florid symptoms, mania and psychosis; people behaving in very obviously disturbed ways. However, there was a view that in the UK expressions of distress were more placid. Somalis did not differentiate between various forms of mental illness, but they did identify problems not attributed to *waali* due to spirit possession. Whittaker et al. also report beliefs in spirit possession, but comment that

the range of beliefs held by the Somali community may not be very different to the range of Western beliefs regarding possession.

'Identity and beliefs' were a main theme in Whittaker et al's study. Conflicts existed between strong religious and cultural influences, and acculturation to western ideologies had led to scepticism amongst many woman concerning traditional beliefs, such as spirit possession. Robertson reported on a divergence in expressed views on mental health. Mental health workers adopted a biomedical model, whereas amongst lay people symptoms were attributed to non-physiological causes including psychosocial and/or supernatural ones, and religion and beliefs about predestined outcomes were strong influences on ways of thinking about mental illness.

'Concealment, secrets and distancing' was a main theme reported by Whittaker et al. A tension existed between on one hand not wanting to be lonely, wanting to seek professional and non-professional support, and on the other hand needing to hide emotions, and maintain appearances and confidentiality. The authors suggest this relates top fears of being rejected, or labeled as 'mad', 'bad', or 'possessed', a theme also discussed by Robertson.

Robertson reports gender differences in levels of both mental health problems and help-seeking behaviour. Men were seen as experiencing greater mental distress, largely due to marital breakdown and the effects of khat. Women found it easier to talk about their distress, and approach their GP, whereas men would chew khat, self-medicate and talk politics.

### **The impact of migration and refugee status on mental health**

Migration has commonly and usefully been conceptualized as comprising of different chronological stages (e.g. Bhugra, 2004). Each stage is associated with different stressors, responses and coping strategies (Lustig et al., 2004). In considering factors



impacting on mental health, a three-phase model will be used to structure this section of the review: premigration experiences in the country of origin, selection for migration and the migration experience, and postmigration experiences.

### *Premigration experiences*

The recent chaotic political and human rights situation in Somalia is the context for many UK-based Somalis pre-migration experiences. The majority of Somalis living within England are refugees, who are likely to have experienced traumatic events in Somalia prior to their migration. Bhui et al. (2003) interviewed a community-based, random sample of 180 male and female Somalis in London, and found high levels of exposure to a range of pre-migration traumas. They report that overall 88% had been in a combat situation, 80% had experienced poor health, 78% had witnessed a murder, 70% had been separated from family, 62.5% had felt close to death, and 58% had experienced a shortage of food. Men had experienced torture, imprisonment, serious injury, enforced isolation and were close to death more often than women.

The impact of war-related trauma on individuals and communities has attracted much research and debate, and the usefulness of the Western concept of Post Traumatic Stress Disorder (PTSD) has been widely questioned (e.g. Summerfield, 2000, 2001a). Yehuda & McFarlane (1995) reviewed existing research and argue that findings are generally inconsistent with the notion that traumatic events are the primary cause of PTSD symptoms, and challenge the idea of PTSD as a typical stress response. However, recent published research in refugee populations has consistently found a relationship between severity of trauma and psychological outcome using measures of post traumatic stress symptomatology. Silove (2000) reviewed the literature on the psychological impact of war and mass conflict and cites a number of studies demonstrating a dose-effect relationship between exposure and PTSD. Furthermore,



they argue that certain events, particularly torture and severe human rights violations, are particularly threatening, and likely to have long-lasting impact on PTSD symptoms.

Bhui et al. (2003) found that cumulative pre-migration trauma was an independent risk factor for anxiety and depressive states amongst Somalis, and that some specific traumatic events such as food shortages and being lost in a war situation were associated with higher levels of psychiatric symptoms. However, combat experiences were associated with a reduced chance of anxiety and depression, the authors suggest that this may be due to resilient individuals being recruited into combat, or a response bias due to combat-based trauma leading to avoidance and minimization of emotional difficulties.

The cultural background to migration may be regarded as another aspect of the premigration experience. Rousseau et al. (1998) have described three pillars impacting on myths of departure. The first is the role of travel in Somali culture. The Somali people have a nomadic, pastoral tradition within which travel is considered to be a learning process and source of wisdom, a rite of passage and a sign of increased maturity. The aim of travel is to return with something new (knowledge or material possessions), and returnees must distribute the things they have brought back amongst their relatives. The second pillar is the key social structure of the age group, or *qeyr*, whose members share the same social aspirations. The collective plan of the *qeyr* (in this case migration) often dominates individual decision making. Once a departure plan has been formulated it enters the *niyaad*, this third pillar refers to spirit and heart (the totality of a person). Anything entering the *niyaad* becomes a profound belief that cannot be uprooted without pain and risk and the involvement of spiritual forces.

Rousseau et al. point out that these three pillars can be sources of support but also stress and conflict should expectations not be met. They argue that consideration of these pillars allows the roots of potential mental health problems to be pinpointed. If,

in line with Pillar 1, travel represents growth and increased social status, any failure will trap the youth in a position of dependency, whereas success places heavy obligations to share experience and support others. If, however, he carries out his plan to migrate but does not contribute to the solidarity effort expected of him (Pillar 2) he will exclude himself from the group, potentially causing long-term personal difficulties. If his departure plan, which he has identified strongly with (Pillar 3), fails he will be weakened at best, and at worst the very foundations his identity may be shattered.

### *Selection for migration and migration experiences*

There has been little research on the migration experiences of Somalis, or other groups of refugees, with a much greater emphasis being placed on the before and after phenomena. Many Somali refugees experience long premigration waits and extended transition periods in different intermediary countries before reaching their final destinations (Robertson 2002; Rousseau et al., 1998).

Day & White (2001) interviewed 10 Somalis in the UK who classed themselves as 'refugees' or 'asylum-seekers'. They describe a 'two-stage' (or more than two stage) process in the flight of almost all Somalis to the UK. The first stage, consisted of journeys to transit countries (commonly Ethiopia, and Arab states), undertaken by 'whatever means necessary' to escape danger. Accommodation in these countries was in either urban communities or (more commonly for women) refugee camps. The second stage, involved the journeys on to their subsequent, or final destination (in this case the UK). The choice as to the UK as a final destination was influenced by links with family and communities already in the UK, the availability of forged documentation, and, for a number of men interviewed, opportunities to join with political movements set-up in the UK. The authors report that although the UK was a conscious choice for many

participants, others, particularly women, had no effective choice in their final destination.

The only study to explicitly consider the migration experiences of Somalis was Rousseau et al's (1998) ethnographic exploration of the experiences of young men from the north of Somalia. Although their study is limited in that it focusses only on the experience of a cohort young men, it contributes to the understanding of the migration experience and merits review here. They interviewed young Somalis in Canada, Ethiopia and Somaliland, consulted key community members and took data from clinical consultations by young refugees with Canadian psychiatric services.

Rousseau et al. describe how kinship and peer relations underpin a network of solidarity upon which migration depends. Kinship and ancestral ties ensure financial and logistic support (papers, passports, visas etc), as well as accomodation throughout the intermediate stages of the journey. Whereas peers provide moral support, material help, and information. These networks can be problematic as young Somalis can feel trapped in a network of obligations and risk feeling like an outcast from his group if obligations are not met.

They describe how long frustrating waits can effect mental health: "daily brushes with success and failure, acceptance and rejection, alternately fan their hopes and plunge them into despair (p. 396)". Young men cope with long, painful waits by sharing departure plans and dreams under the influence of khat, but this can lead to a blurring of the boundary between dreams and reality and madness may occur: the departure of the spirit. . The authors suggest that a man's madness can be seen as the last opportunity to mobilise support networks with regard to departure: it displaces the pressure from him onto family and peers who can help him migrate and fulfill the spirits's wishes.



### *Postmigration experiences.*

Recent research suggests that post-migration stressors may be particularly important in the mental health of refugees (Lie, 2002; Silove et al., 1997), and that mental health problems within refugee communities need to be viewed in the context of their current situation in Britain as well as past experiences.

The background to the post-migration experiences of Somali migrants is the socio-political environment of the time. In recent years, influenced by media coverage and the rise of the far Right parties across Europe, the UK government has taken a tougher stance on immigration and public attitudes towards immigrants have become more hostile. The terrorist attack of September 11 (2001) and the subsequent 'war on terrorism' has also further stereotyped and stigmatised refugees and members of the Muslim faith (e.g. Robertson, 2002; Silove & Ekblad, 2002).

Bullivant et al. (1995) interviewed a random sample of 50 Liverpool-based Somalis using a semi-structured interview. Difficulties adjusting to life in the UK were reported by 77% of their sample, 54% reported emotional problems as a result, and 23% reported a 'great deal of emotional difficulties'.

There are many aspects of the postmigration experience which may contribute to poor mental health within the Somali community within the UK. Dihour (1989) suggests that social isolation, economic deprivation, acculturation, inadequate housing, unemployment, racial intolerance, cultural differences, language barriers, ongoing uncertainty about the fate of relatives, ongoing fighting in Somalia, prolonged problems with immigration status and fear of being returned to their country of origin are all related to poor mental health in Somalis.

A small number of studies have addressed the impact of some of these factors within Somalis, and these are reviewed below.

Cole & Robinson (2002) describe how the Somali community in the UK experience racial harassment; high levels of unemployment; language difficulties; difficulties accessing education, training, and healthcare; and inadequate or inappropriate accommodation. They also report respondents' anger that academic and vocational qualifications gained outside the country were not recognised by UK employers, and that there were not opportunities to convert existing expertise, experience and training into UK recognised qualifications, this led to a deskilled and deprofessionalised community.

Silveira & Allebeck (2001) explored views on mental health and well-being, and identified sources of stress and support amongst 'first-generation' older Somali men in London, using qualitative analysis of face-to-face interviews. They found that depression was strongly related to poor physical health, a factor that may be particularly pertinent to the older generations. The other primary factor related to depression was worries about the situation in Somalia, particularly in those participants without family in Britain and those with knowledge of their relatives' fate in Somalia. Other stressors identified included loss of economic, social and role status; difficulties accessing services; racism and discrimination; and environmental stresses (homelessness, climate and working conditions). They also list a number of 'adaptive resources' including linguistic proficiency, cultural identity, and physical or material living conditions.

Rousseau et al. (1998) discuss the cultural burdens faced by Somalis living in the West. They describe how once refugees have attained their dream of departure they become indebted to repay what they have received from family and peers. In many cases this may not be achievable as they experience the realities of the life of a refugee. Departure in Somali culture is also closely linked with return, and there may be expectations to return to Somalia having gained something, be that education, money or immigration for others, and also without any loss of identity as either a Somali or a



Muslim. The authors suggest that Somali refugees may cope with these pressures by either creating an illusion of success in front of friends and relatives in Somalia, by inactivity and exile rather than returning home empty-handed, or by distancing themselves from their culture and obligations. The authors do not however consider how these pressures may influence positive outcome.

Bhui et al. (2003) found no relationship between employment status and psychiatric symptoms in their Somali community sample, but comment that the ubiquitous nature of unemployment in their sample may have contributed to this result. However, a number of studies have found a link between employment and improved mental health in other refugee groups (Eastmond, 1998; Lie, 2002).

## **Methods of Coping**

Three qualitative studies (Robertson, 2002; Silveira & Allebeck, 2001; Whittaker et al., 2004) have addressed ways in which Somalis in the UK may cope with mental health problems and stressful life events. Both Whittaker et al. and Robertson identified families as the most important sources of support. Families were described as supporting each other, and containing problems. Friends were also seen as useful forms of support, although there were concerns about confidentiality. Silveira & Allebeck found that instrumental and emotional support received from family had a strong positive effect on mood by increasing satisfaction with personal needs, confidence in relationships and the future, and perceived control over own life circumstances.

Religion was also a strong force in each sample. Robertson reports that all respondents emphasized the fundamental importance of religion and religious belief in all areas of their lives, including mental health. Silveira & Allebeck identified religious faith as an effective coping strategy, although it appeared that faith prevented disclosure of affective symptoms amongst people who perceived the subject to be prohibited or

show moral weakness. Whittaker et al. describe how religion promotes psychological wellbeing and provides guidance.

Both Whittaker et al. and Robertson report that professional services were seen as useful in promoting good mental health, however Robertson reports that perceptions about the negative effects of psychiatric treatment and poor knowledge of services affected help-seeking behaviour. Silveira & Allebeck list a number of further 'adaptive resources' including linguistic proficiency, cultural identity, and physical or material living conditions.

One of the most universal findings from the wider refugee literature has been the relationship between social support and well-being. Hauff & Vaglum (1995) found the absence of a close-confidante in exile to be predictive of psychiatric morbidity amongst Vietnamese refugees in Norway. Gorst-Unsworth & Goldenberg (1998) interviewed male Iraqi refugees in the UK and found low affective support and confidant support to be related to both severity of post-trauma reactions and depressive reactions. They found poor social support to be a stronger predictor of depressive morbidity than trauma factors. Lie (2002) investigated changes in symptomatology over a 3-year period post-migration, and found a relationship between affective social support and PTSD and depressive reactions, although the measure of social support used is somewhat unclear. Interestingly, she also found that post-migration stressors occurring both in the home and host countries were related to changes in trauma symptomatology.

As part of a discussion of ways of coping with social and psychological problems, it is important to consider the use of the drug khat. Khat (also known as *qat* or *chat*) is a perennial shrub that is cultivated in Ethiopia, The Yemen and Kenya, and flown into UK airports from where it is rapidly transported within the UK and abroad. The chewing of young stems and leaves has a stimulatory effect, similar to that of amphetamine (Kalix & Khan, 1984). It is usually chewed by groups in a social setting,

and is rarely chewed alone. Khat use has increased in popularity in Somalia since the end of prohibition there (Cox & Rampes, 2003), and use is widespread amongst Somali migrants: Bhui et al. (2003) report that 63% of men, and 17% of women in a random sample of Somalis in London used khat. There remains a debate as to whether khat can cause dependence or whether there is a withdrawal syndrome, but tolerance to khat practically does not occur (Cox & Rampes, 2003). Khat itself is not prohibited within the UK:

A number of researchers have stressed the ways in which khat may be used adaptively. Nabuzoka et al. (2000) interviewed 94 young Somalis in Sheffield about khat use. They suggest that although the vast majority of respondents saw use as problematic, khat chewing may serve as a means of ‘psychological escape’ from socio-cultural and emotional problems. Stevenson et al. (1996) investigated the meaning of khat use amongst Somali migrants in Australia using focus-group interviews. They stressed that a continued desire to use khat should be seen as part of the community reviving previous ways of life, and that through khat use migrants are able to preserve distinct identities within culturally diverse communities. They note how khat gatherings can be used as focal-points for inter-group negotiation, and as a means of bringing people together. Robertson (2002) reports that within the Somali community khat is seen as a coping mechanism that can lead to other problems.

Recently many people within Somali and Yemeni communities in the UK have become increasingly concerned with detrimental social and psychological effects of khat chewing (e.g. Allen, 2002; Bullivant et al., 1995). Griffiths et al. (1997) investigated patterns of khat use by semi-structured interview with 207 Somali khat users living in London. Many participants reported a number of adverse effects, although these were typically “mild” in nature. The most commonly reported problems

were trouble sleeping (90%), loss of appetite (74%), mood swings (72%), anxiety (47%), depression (44%) and irritability (35%).

Three studies have compared the mental health of khat users and non-users, using translated measures administered by interview. These have failed to find any consistent relationship between mental health and khat use in either a native Yemeni population (Numan, 2004), or in UK samples (Ahmed & Salib, 1998; Bhui et al., 2003), although Bhui et al. did find an association between khat use and the presence of suicidal ideas. A number of case reports suggest that frequent khat use may lead to an acute psychosis, although adverse effects appear to be dose-related, and full remission commonly occurs without neuroleptic treatment (Cox & Rampes, 2003).

In communities where khat is used regularly it can have a negative impact on socio-economic conditions. Cox & Rampes describe decreased productivity resulting from habitual khat use in East Africa, although they note that some believe that moderate use can increase work output due to stimulatory effects. They also argue that khat use is related to family and marital problems due to neglect, dissipation of family income, and inappropriate behaviour.

In summary, relationships between khat use and both mental health, and socio-economic conditions remain unclear. Users have reported high levels of problems associated with khat use, however, studies comparing users and non-users have not found strong evidence for a relationship between khat use and mental health. It is not possible to divorce the impact of khat from the socio-economic context in which it is used, and any relationships that do exist are likely to be complex and multi-directional.

### **Levels of Psychological Distress**

Levels of psychological distress amongst refugee groups have been widely considered to be higher than that of non-refugee communities (e.g. Aldous et al., 1999), however



there is little objective research evidence to support this, and there are problems with the application of Western concepts of mental health in other cultures (Summerfield, 2000).

A small number of studies have attempted to quantify mental health problems within the UK Somali community. The majority of these studies have used translations of existing scales based on Western concepts of mental health and well-being, many of which do not translate readily into the Somali language (Bhui, Mohamud et al., 2003). In the absence of suitable measures standardized with a Somali population, comparisons in the levels of psychological distress with other ethnic groups are problematic.

As part of a study investigating the impact of khat on mental health Ahmed & Salib (1998) interviewed 52 Somali men resident in Liverpool (the sample was designed to enable comparison between khat users and non-users). Trained Somali interviewers used an orally presented structured questionnaire, and psychological dysfunction was measured by the General Health Questionnaire-28 (Goldberg & Hillier, 1979). Overall levels of psychiatric morbidity as measured by the General Health Questionnaire (GHQ) were 38.5% (using a 4/5 cut-off), somewhat higher than that reported by Goldberg & Hillier in general population samples (25%-32%).

Rowlands & Blackmore (1995) used Somali interviewers to access 68 members of the Somali community in Sheffield. A structured interview schedule included the GHQ-28 and the Impact of Events Scale (Horowitz, 1979). They reported that 81% of respondents could be considered to be experiencing psychological difficulties as measured by the GHQ (using a conservative 5/6 cut-off), and reported very high levels of trauma symptomatology. These levels of psychological dysfunction are much higher than those reported by Ahmed & Salib (1998). The authors raise reservations concerning the accuracy of the results relating to the translation of the questionnaire. In addition, there may have been various pressures to “talk up the numbers” (Stubbs, 1999)



with respect to levels of distress in order to mobilize external resources for mental health work.

Bhui et al. (2003) interviewed a community sample of 180 Somalis. They reported that 26.4% of men, and 7.9% of women reported having received previous psychiatric care, that 13% of men and 14% of women were taking psychotropic medication, and 21% of men and 18% of women had at least one active symptom of psychosis. The authors do not present any comparative data.

There has also been concern expressed about anecdotal accounts of the large number of young Somali boys and men committing suicide in the UK, despite suicide being unheard of in Somalia (CVS Consultants, 1999; Summerfield, 2001b).

### **Use of mental health services**

There is a body of research concerning the treatment received by black and ethnic minority groups from mental health services within the UK (e.g. Nazroo, 1997), prompted by concerns about the high admission rates to psychiatric units of young African Caribbean men compared to whites. It is likely that such inequalities in care have led to considerable distrust within ethnic minority groups as to the role of psychiatric services and led to an unwillingness to accept counselling and therapeutic services (CVS Consultants, 1999). Bullivant et al. (1995) investigated the mental health needs of Somalis in Liverpool and report that “there appears to be virtually no use of existing mental health day care provision by Somali people (p.25)”. Three studies have addressed the question of mental health care utilization by UK Somalis.

Cole & Robinson (2002) conducted focus groups in 5 Somali communities in the UK. They report that Somalis experienced difficulties accessing general health care, linked to limited understandings and awareness of points of contact and access, as well as language difficulties. They reported that Somalis see themselves as having very

specific and unique concerns and priorities rooted in their culture, social structures, religious beliefs and shared experiences, and that their needs and requirements were rarely met by either mainstream white-led agencies, or services for black and minority ethnic groups.

Whittaker et al. (in press) report that young Somali women saw professional services as instrumental in promoting wellbeing and providing support, but communication barriers and lack of information led to an underutilization of services. The participants felt that it was important for non-Somali professionals to learn about Somali culture as they were uncomfortable with approaching another Somali person about mental health issues, due to concerns about confidentiality. However, seeking external support was also seen as dangerous: the Somali community could disapprove and reject the whole family for 'abandoning' their relative.

Silveira & Allebeck (2001) noted that feelings of adequacy or inadequacy in access to health and social services strongly permeated Somali respondents' views on satisfaction with life. Language skills were related to satisfaction with medical care, and ethnicity was commonly argued to be a contributory factor of disadvantage in access to services.

A common response of minor ethnic communities to the inadequacies of mainstream services has been to set up alternative community-led and voluntary sector agencies (Cole & Robinson, 2002), and a number of Somali-led mental health projects have been formed (CVS Consultants, 1999, Dihour, 1989). However, Cole & Robinson (2002) comment on the difficulties many Somali-led agencies have had in securing formal funding streams, and that of the diverse range of Somali-led agencies in various fields, "the vast majority are relatively small operations running on a shoestring budget and often accommodated in unsuitable or dilapidated premises (p.74)". They suggest that funding difficulties may be due to a lack of understanding of 'the system', a lack of

community members with professional expertise, divisions within the Somali community, and problems convincing funders of the extent of need within the community due to a lack of research evidence and demographic data.

### **The response of mental health services**

Research has identified the importance of professional services in the promotion of psychological well-being for Somalis in the UK (Robertson, 2002; Whittaker et al., 2004). Professionals within statutory services can usefully support community-led, voluntary sector organizations to offer flexible and culturally-aware support services. However such services are limited by their marginal position in relation to more mainstream services (Watters, 2001), and individuals' may wish to access mental health support outside of their community, and from non-Somali workers, due to concerns about confidentiality.

Mainstream services are not currently meeting the needs of Somalis. They must aim to be accessible, flexible and appropriate, reflecting the standards in the Mental Health National Service Framework (DOH, 1999). Perhaps the most quickly achievable means of raising the standard of mental health services for Somalis is a properly resourced, supervised and utilized interpreter service (Tribe, 1999), particularly within GP surgeries which are likely to be a main point of contact with health services (Summerfield, 2001b). It is also vital that mental health workers acquire an awareness of Somali conceptualizations of mental illness and obtain informed consent at all stages of assessment and intervention. Other ways in which statutory services may address the mental health needs of the Somali community more effectively are discussed below.



### *The trauma debate*

The debate concerning the application of Western psychiatric categories in refugee populations has fundamental bearing on interventions for Somalis experiencing psychological distress. Critics have argued that PTSD is an entity constructed as much from sociopolitical ideas as from psychiatric ones (Summerfield, 2001a), and that introducing the concept of PTSD based on the 'mind as an information processing instrument' to individuals from different cultures is at best confusing (Bracken et al., 1995). Summerfield suggests that the reframing of 'normal distress' as psychological disturbance is a serious distortion and can increase people's sense of themselves as passive victims rather than active survivors (Summerfield, 2000). In particular relation to war-based trauma, he argues that psychiatric models largely ignore the role of social action and empowerment in recovery, and that the suffering engendered by war is best resolved in a social rather than biopsychomedical context (Summerfield, 2000).

Others have argued that PTSD is a valid and useful diagnostic category (Hodes, 2001) whilst recognizing the cross-cultural limitations of the diagnosis and that it is not the only psychiatric response to trauma (Mezey and Robbins, 2001). They suggest that dismissing PTSD as a valid diagnosis would deny the ongoing suffering of those exposed to extreme trauma, and restrict the implementation of clinically effective interventions such as cognitive and behavioural approaches. Diagnosis of recognized 'mental disorder' may also have implications for the provision of individual support, funding of services for refugee groups, and individual asylum claims.

Zarowsky (1997) considers the application of a medical model of psychological distress to Somali refugees. She points out that the medical model allows illness to be approached from a non-moral dimension: e.g. illness need not be viewed as punishment for transgression. This can allow taboo issues to be addressed, but it blocks the



exploration of other domains of experience, such as political and economic contexts that may be crucial in understanding and resolving difficulties.

There are compelling arguments both for and against the ‘trauma model’ of distress in refugees. Perhaps the most useful and ethical approach is for clinicians to be open and receptive to individual explanations given by clients, and to fully explore historical, cultural and current contexts in each individual case before deciding whether to apply a trauma model to an individual’s distress. Such an approach would represent the adoption of a more “user-led” as opposed to “service-led” response to mental health problems within the Somali community.

### *Models of interventions*

Watters (2001) considers emerging approaches to the mental health care of refugees. He suggests that a holistic approach is needed that address fundamental social and economic issues as part of mental health care. At an institutional level he argues for the use of focus groups to open discussion about the needs of refugee communities, and services the communities feel would help address the needs. At a service level he proposes an approach recognizing hierarchies of needs, such that higher level physiological and safety needs are addressed before the provision of specialist mental health care. He suggests that such an approach should incorporate training to mental health workers in the mental health needs of refugees, provision of advocacy services, and specialist services run by refugees responsive to the particular needs of refugee communities. At the treatment level he advocates broad assessments of need based on the client’s own ideas about their mental health and treatment, and individualized ‘treatment’ spanning traditional boundaries between health and social care.

Zarowsky (1997) similarly suggests, on the basis of her observations of the Somali refugees in Ethiopia, that exclusively psychological or psychiatric approaches to

working with Somali refugees may not be effective, and that politics, poverty and perceived collective injustice need exploring before personal suffering. She argues that a narrow focus on feelings divorced from concrete action would be incomprehensible and ineffective.

Literature suggests that improving levels of social support will have a positive impact on mental health, and there is evidence for the overall usefulness of social support interventions (Hogan et al., 2002). Confidant support may be provided by Somali workers who understand the cultural aspects and context of the trauma, or by appropriately trained professionals. However, affective support can only be provided by family and friends. Efforts to engage individuals with their family and community networks, as well as supporting the reunion families separated by migration, may be effective interventions promoting good mental health.

Professional-client encounters are but a small proportion of healing relationships in Somalia, although within the Somali community in the UK there appears to be increasing skepticism concerning traditional beliefs due to acculturation to Western ideologies (Whittaker et al., 2004). Religion is also an important framework in which many Somalis place their experiences and distress. Creative approaches involving elements of interactions between 'folk' and professional healthcare, as well as religious leaders, may be the most effective for many Somalis.

With regards to khat use, many individuals may not be experiencing problems associated with its use. However, harm reduction interventions may be useful for those whose use has not become problematic (Griffiths, 1998), and attention should be directed towards identifying, and intervening with those who are experiencing related problem. Nabuzoka et al. (2000) suggest two levels of intervention: social intervention related to community development given the social role of khat use; and individual intervention including counseling and advice. At a national policy level, the Home

Office's Drugs and Alcohol Research Unit is currently investigating the health impacts of khat, and may recommend that it be classified with other illegal drugs (Jha, 2004).

Any changes in the way that khat is defined by the wider community will have an impact on the socioeconomic and psychological impact of its use.

### *Psychotherapeutic approaches*

A number of researchers have questioned the use of psychotherapy as practiced in Western countries with individuals from different cultures. The detached introspection of talk therapy may be an alien activity to Somalis and many other refugee communities (Summerfield, 2001b). Bracken et al. (1995) argue that Western psychotherapy can 'individualise' the suffering of the person involved, which may be harmful in a sociocentric society, such as the Somali one, where an individual's recovery is intimately bound with that of the wider community. Models of therapy involving expertise and a new 'language' may also undermine both existing approaches to alleviation of distress within the culture, and local community structures that protect against the negative effects of trauma (Bracken et al., 1995).

However, in individual cases, it is likely that Western counseling or psychotherapeutic approaches will be asked for and may be effective. Summerfield (2001b) suggests that an appropriate model of counseling may be one that "assumes some background knowledge of the political landscape from which a particular client has fled, is eclectic and streetwise, acknowledging that practical advice and advocacy is of itself psychologically supportive and that a recounting of traumatic experiences is an option but not a necessity (p.163)".

Zarowsky (1997) suggests that a potentially useful therapeutic intervention with distressed Somali refugees in the West may involve finding a way to place "an individual's experience, distress, and current situation in a collective story which is both



culturally and emotionally meaningful and, of critical importance, able to inform action (p.16)". This description of constructing a collective story has much in common with narrative approaches (White & Epston, 1990), which may be usefully employed with Somali clients, although there is no published literature on the use of such approaches in refugee groups.

### **Summary**

Somalis are a large minority group within the UK. Many have entered the UK as refugees and have suffered high levels of pre-migration trauma related to violent conflict in Somalia. Pre-migration trauma has been found to be a risk factor for emotional difficulties, and continuing conflict in Somalia are a source of ongoing stress for Somali migrants.

Somali migrants are subject to a range of pre- and post-migration stressors that are implicated in poor psychological outcome. These include family separation, obligations to family remaining in Somalia, loss of social and role status, language difficulties, unemployment and a wide range of other factors associated with socio-economic disadvantage. Studies have shown significant levels of psychological distress in Somali populations in the UK.

Studies have identified support from family and friends, and religion as the main ways Somalis may use to cope with mental health problems and stressful life events. The drug khat, is also widely used by Somali men, and may be seen as a way of coping with social and psychological problems, although there are concerns from within the community that khat may be associated with negative psychological and socio-economic outcome. Research to date has failed to prove a link between khat and mental health.

Somali conceptualisations of mental health and well-being differ markedly from dominant Western ones, and acculturation has reduced the reliance on traditional



methods of healing and support. However, utilisation of statutory mental health services is low. There are many barriers to accessing existing services and there is a need for a more culturally sensitive service provision to meet the needs of the Somali community.

### **Further research**

A relationship between khat use and mental health has been unproven. Further research into possible links between use of khat and psychological well-being should consider the potential role of khat as a means of coping with socio-cultural and emotional problems.

Little is known about the migration and post-migration experiences of Somali, or other refugees within the UK. In the context of less than favourable public attitudes, it is important to understand the post-migration experience of immigrants in the UK, and implications for well-being. Longitudinal studies following cohorts of immigrants during the first years after their arrival in the UK would increase knowledge in this respect.

There is evidence of the under-utilisation of health care by Somalis. If services are to be more accessible, and better meet the needs of the Somali population (as well as other excluded groups), the complex reasons leading to this situation must be better understood. Qualitative investigations of health-care utilisation by different ethnic groups would go some way towards understanding different patterns of utilisation.

Quantitative research into the mental health, and mental health needs of Somalis is restricted by the lack of appropriate, culturally-validated measures of emotional distress. The development of such measures is important if we are to detect the presence of emotional difficulties, and develop interventions with proven efficacy for Somalis.

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# Research Report

## Relationships between trauma, khat and post-migration factors and the mental health of adult Somalis in Sheffield

### Introduction

Previous studies have highlighted the importance of both pre- and post-migration risk factors in the mental health of Somali migrants (Bhui, Abdi et al., 2003; Cole & Robinson, 2002; Silveira & Allebeck, 2001). Studies with other refugee groups have commonly found an important role of social support in promoting psychological well-being (Gorst-Unsworth & Goldenberg, 1998; Hauff & Vaglum, 1995; Lie, 2002). There is ongoing debate about the possible impact of use of the drug khat on mental health, although published studies have failed to show any clear relationship between khat use and mental health (Ahmed & Salib, 1998; Bhui, Abdi et al., 2003; Griffiths et al., 1997). The present study attempts to investigate the impact of a wide range of possible factors related to mental health in a sample of the Somali population in Sheffield.

### *Somali communities in England*

The 2001 Census reports 43,373 individuals born in Somalia living in England and Wales. This information is limited as it does not include individuals who identify themselves as ethnic Somalis but were not born in Somalia. Unofficial estimates of the Somali population in the UK are much higher: Ahmed (2001) estimated the Somali community to number about 100,000, and the Refugee Council (2003) report estimates that well over 150,000 Somalis have entered the UK. Within the UK, London has the largest Somali community, large numbers of Somalis also live in Bristol, Cardiff,

Liverpool and Sheffield. The number of Somalis living in Sheffield is unknown, however, members of local community groups estimate Sheffield Somalis number between 6000 and 8000.

Sheffield has a long association with Somalis, particularly men recruited into industrial employment as early as the 1930s (Day & White, 2001). The majority of Somali people currently living within Sheffield are refugees who came to England in the early 1990s following the civil war in Somalia, many of whom have been exposed to multiple trauma, including seeing relatives murdered, tortured and raped, and experiencing torture and physical abuse themselves (Rowlands & Blackmore, 1995). Allen (2002) reported factors influencing the mental health needs of Somali young people within Sheffield included cultural difficulties, racism, school exclusion, cultural shock, lack of positive role models, and poverty.

UK census data for 2001 reports that 54% of the Somali population is female, and that just 26% of children are living in a 'married couple' or 'cohabiting couple' family. Levels of employment within the UK Somali community are very low: 2001 UK Census data shows of 16-74 year olds, just 8.6% were employed and 19.3% were students. Bhui, Abdi et al. (2003) found that 18% of their random community sample in London were employed.

For a large proportion of Somalis, Somali is their only language, particularly women and older people (Elam et al., 2001). Somali only became a written language in the 1970s. However, local estimates suggest that approximately 70% of adult Somalis within Sheffield are able to read either Somali or English.

### ***Trauma and psychological distress amongst refugees***

A number of studies have investigated the trauma experiences and psychiatric status of refugee populations. Several recent longitudinal studies (e.g. Mollica et al., 2001; Lie,



2002) have found broadly consistent results. Trauma has been identified as a potent risk factor for adverse psychological outcome, with an influence of both the amount as well as type of trauma experienced. Bhui, Abdi et al.(2003) found that cumulative pre-migration trauma was an independent risk factor for anxiety and depressive states amongst Somalis, and that some specific traumatic events such as food shortages and being lost in a war situation were associated with higher levels of psychiatric symptoms. Worryingly, longitudinal studies have found evidence of increasing (Lie, 2002; Roth & Ekblad, 2002) or stable (Mollica et al., 2001) levels of posttraumatic stress disorder (PTSD) symptomatology during the period of repatriation.

Asylum seekers arriving in Britain now face a number of daunting challenges (Burnett & Fassil, 2002). These include detention, temporary residency, restricted rights to work, and administrative obstacles to family reunion. It is likely that these experiences generate feelings of insecurity and fear that may be already present due to experience of trauma in their countries of origin. Lie's (2002) study suggests that these postmigration stresses can act to perpetuate post-traumatic stress symptoms. In addition, within Britain increased numbers of refugees and asylum seekers, negative media coverage, and fears of global terrorism have led to an upsurge in hostility towards immigrants which may intensify the fears and insecurities experienced by refugees at both an individual and communal level.

### *Use of Khat*

*Catha edulis*, commonly known as khat, qat, or chat is a perennial shrub that grows wild in mountainous areas East Africa and the Arabian peninsula. The chewing of young stems and leaves has a stimulatory effect, and people in these countries have used it medically and recreationally for many centuries (Stevenson et al., 1996; Cox &

Rampes, 2003). Khat is usually chewed by groups in a social setting, and is rarely chewed alone.

There remains a debate as to whether khat can cause dependence or whether there is a withdrawal syndrome, but tolerance to khat practically does not occur (Cox and Rampes, 2003). Cathinone, the most potent psychoactive chemicals in khat itself, when processed for injecting, is listed as a Schedule I drug under the Misuse of Drugs Act (1971), but is not commonly used as a recreational drug. Khat itself is not prohibited within the UK. Khat use was banned in Somalia in the late 70s and early 80s as it was seen as a major problem causing family breakdown and economic problems (CVS Consultants, 1999), but its use has increased in popularity in Somalia since the end of prohibition there (Cox and Rampes, 2003). It is widely used by Somali and East African migrants, although use by women is less accepted than use by men. Bhui, Abdi et al. (2003), using a community sample of 180 Somalis in London, report that 63% of men, and 17% of women used khat.

Recently many people within Somali and Yemeni communities in the UK have become increasingly concerned with the detrimental effects of khat chewing (e.g. Allen, 2002; Bullivant et al., 1995). There is some evidence that frequent khat use may lead to an acute psychosis, with research suggesting that adverse effects are dose-related, and that full remission commonly occurs without neuroleptic treatment. (Cox & Rampes, 2003).

Griffiths et al. (1997) investigated patterns of khat use amongst 207 Somalis living in London. Many participants reported a number of adverse effects, although these were typically “mild” in nature. The most commonly reported problems were trouble sleeping (90%), loss of appetite (74%), mood swings (72%), anxiety (47%), depression (44%) and irritability (35%). In contrast, 61% of respondents agreed the “most people do not experience problems with khat”.

Nabuzoka and Abdi Babadhe (2000) asked 94 young Somalis in Sheffield questions about their patterns of khat use, and their general perceptions of khat as well as perceived problems of using khat. They reported on the social dimension of khat use, and that most respondents saw khat use as problematic but rationalized it in terms of personal pressures and socio-cultural and emotional problems. The authors suggest that excessive khat use among Somalis should be seen in the wider context of a people dislocated from their country of origin.

Three studies have compared the mental health of khat users and non users. Bhui, Abdi et al. (2003) found an association between khat use and the presence of suicidal ideas (using self-report items from the Beck Depression Inventory, Beck et al., 1996). However, they found no significant relationship between khat use and either anxiety and depression scores (as measured by the Hopkins Symptom Checklist, Mollica et al; 1993) or symptoms of psychosis (as measured by items from the Brief Psychiatric Rating Schedule (Overall & Goreham, 1962). Ahmed and Salib (1998) compared symptoms of psychological health (measured by the GHQ-28, Goldberg and Hillier, 1979) between 27 khat users and 25 non-users in Liverpool. No significant differences were found between the two groups with respect to GHQ-28 scores or demographic characteristics. Numan (2004) assessed associations between psychological symptoms and khat use in the native Yemeni population. They surveyed 800 male and female Yemeni adults, using the SCL-90 to measure psychological symptoms. In the sample as a whole they found that the incidence of phobic symptoms was significantly lower in khat users than non-users, whereas other symptoms were unrelated to khat use.

In communities where khat is used regularly it can have a negative impact on socio-economic conditions. Cox and Rampes (2003) describe decreased productivity



resulting from habitual khat use in East Africa, and family and marital problems due to neglect, dissipation of family income, and inappropriate behaviour.

In contrast to the majority of published studies which have explicitly investigated problems associated with khat use, Stevenson et al. (1996) investigated the meaning of khat use amongst Somali migrants in Australia using focus-group interviews. The authors stressed that a continued desire to use khat should be seen as part of the community reviving previous ways of life, and that through khat use migrants are able to preserve distinct identities within culturally diverse communities. They note how khat gatherings can be used as focal-points for inter-group negotiation, and as a means of bringing people together. They also stress the transformations taking place in the meaning of khat within displaced East African communities, and that meanings will be redefined within new social and geographical environments. They conclude that the social risks of khat use are small, and that any potential problems associated with use are more likely to arise from how it is defined within the wider community.

### *Social exclusion*

'Social exclusion' is a term describing the processes which cut people from everyday life. Social exclusion can be conceptualized in terms of either accessibility to citizens' rights or individual participation and identification with the wider community (Huxley and Thornicroft, 2003). Duffy (1995) proposes a dimensional model which defines social exclusion as "an inability [of individuals] to participate effectively in economic, social, political and cultural life.... distance and alienation from mainstream life (p. 8)".

Refugee populations are particularly likely to be affected by such processes, and social exclusion is a pervasive feature of the post-migration experience of many Somalis. Levels of integration with other communities are low, language difficulties

may exist, many young Somalis came to Britain without educational qualifications due to the collapse of the education system within Somalia, and they may not be familiar with the British educational system. These factors have contributed towards very high levels of unemployment, and many Somalis believe they have no future prospects. In addition, Somalis may have difficulties accessing healthcare, and appropriate accommodation. They may be subject to racial intolerance and suffer discrimination and harassment based on their immigrant status and Muslim faith.

Social exclusion has been associated with poor mental health (DOH, 1999), and links between unemployment and mental health have been reported in other refugee groups (Lie, 2002; Eastmond, 1998).

It has also been suggested that the use of khat by Somalis in Britain is more linked with social exclusion than recreation (Prasad, 2002; Nabuzoka & Abdi Babadhe, 2000). It is likely that these circumstances have led to the different patterns of khat use in Somalia and Britain (Griffiths et al., 1997). In Somalia, khat is commonly used in moderation after a day's work, perhaps once or twice per week, whilst in Britain khat may be chewed every day from late afternoon until the early hours of the morning.

### ***Social Support***

Social support has been conceptualized in many different ways, with a wide variety of measures used leading to difficulties in generalizing findings. Hogan et al. (2002) summarise three main types of supportive interaction: emotional support involving communication of caring and concern; informational support involving the provision of information used to guide and advise; and instrumental support involving the provision of material goods.

Emotional support has been consistently found to be related to decreased distress during times of life crisis (Bloom, 1990), and may counteract the negative effects of



social exclusion (Bajekal and Purdon, 2001). Social support has also been found to be an important predictor of well-being amongst refugee samples. Silveira and Allebeck (2001) found family support to be related to both life satisfaction and depression amongst older Somali men living in London. They report that maintenance of minority cultural values, communication of affection and socialisation were important factors in life satisfaction. Gorst-Unsworth and Goldenberg (1998) interviewed male Iraqi refugees in the UK and found low affective support and confidant support to be related to both severity of post-trauma reactions and depressive reactions. They found poor social support to be a stronger predictor of depressive morbidity than trauma factors. Hauff and Vaglum (1995) found the absence of a close-confidante in exile to be predictive of psychiatric morbidity amongst Vietnamese refugees in Norway.

## **Research Method**

Somalis are a large minority group within the UK. Existing literature suggests that pre-migration trauma, social support and social exclusion are related to mental health among Somalis in the UK. Of particular relevance to the Somali community is the use of khat, although the nature of the relationship between khat use and mental health remains unclear. The overall purpose of this study is to look at the interaction between these factors within the Somali community in Sheffield.

A recent study of the feasibility of health surveys among black African people (Elam et al., 2001) reported that language was raised as a widespread issue for Somalis, particularly Somali women, with respect to participation in surveys, and that Somali-speaking interviewers were essential to enable non-literate respondents to participate. Thus, we have chosen to follow previous studies within UK Somali populations (Ahmed and Salib, 1998; Bhui, Abdi et al., 2003; Griffiths et al., 1997) using bilingual Somali interviewers who administered questionnaire items by face-to-face interview.



## **Aim**

The aim of this study was to investigate psychological and other factors related to khat use and mental health.

## **Hypotheses**

1. Mental health will be related to experience of trauma, feelings of social exclusion, and levels of social support (it is predicted that poor mental health will be associated with a high number of trauma experiences, high levels of social exclusion and low levels of social support).
2. Khat use will be related to experience of trauma, feelings of social exclusion, and levels of social support (it is predicted that khat use will be associated with a high number of trauma experiences, high levels of social exclusion and low levels of social support).
3. Mental health will be related to khat use (it is predicted that khat use will be associated with poor mental health).
4. Trauma, exclusion, social support, and khat use will have independent effects on mental health.

## **Method**

The study employed a cross-sectional questionnaire design, measuring a range of variables including demographics, psychological ill-health, social support, social exclusion, trauma history, and use of khat.

### ***Questionnaire administration and pilot***

Members of the local Somali community who were fluent in both the Somali and English languages were employed to administer the questionnaire by interview. Ten interviewers of different ages were selected in order to facilitate sampling a wide range of the Somali community. Six interviewers were male and four female, and interviewers were asked to interview participants of their own sex as this was judged to be most culturally appropriate. Each interviewer was assigned a geographical area within the city from which to access participants in order to ensure that a wide cross-section of the local community was sampled.

Interviewers attended a training day prior to administering questionnaires. This day addressed a number of issues including general interviewing skills, the questionnaire content and Somali translation, administering the questionnaire, mental health issues, and confidentiality.

A small-scale pilot involved each interviewer completing one questionnaire. Following this pilot minor changes were made to ordering of items within the questionnaire. Interviewers were each asked to complete 25 questionnaires by research interview, and paid at a rate of £20 per interview after all interviews were completed.

### ***Participants***

Eligible participants were men and women of Somali ethnicity aged 18 and above and resident within Sheffield. Based on estimates given by local community leaders approximately 3000 individuals meet this criteria. No other inclusion criteria were used except that participants were not members of the interviewer's immediate family. A sampling strategy of 60% male and 40% female was used as a balance between the competing demands of obtaining a representative sample, and surveying a significant numbers of khat users (the vast majority of whom are male).

## *Measures*

Unfortunately, there are no appropriate measures that have been formally validated with Somali respondents or in the Somali language. Such a validation is outside the scope of this study. The questionnaire was translated into the Somali language then independently back-translated into English. The accuracy of the translation was checked by a committee including the lead researcher, Somali mental-health workers and Somali interviewers, and appropriate amendments were made. There was particular difficulty in the translation of questionnaire items relating to mental health. The scales used are based on Western concepts of mental health and well-being, many of which do not translate readily into the Somali language (Bhui, Mohamud et al., 2003). In addition, the scales used a number of culture-specific idioms, such as 'feeling blue', which required the use of alternative conceptually equivalent terms. The development of the final Somali language items relating to mental health required extensive negotiation and discussion within the committee.

Interviewers had available to them both Somali and English versions of the questionnaire. Interviewers were asked to conduct interviews largely in English where possible, using Somali translations to clarify meaning where necessary.

A copy of the questionnaire can be found in Appendix 1. Information was requested in the following areas:

Demographic information including age, sex, employment status, marital status, housing situation, immigration history, occupation (current and prior to moving to England) and educational level.



Psychological distress was assessed by the Hopkins Symptom Checklist-25 (HSCL-25; Mollica et al., 1993). The HSCL-25 has been used in cross-cultural research with Somali respondents (Lie, 2002) and has proved a reliable and valid measure of depression and anxiety in cross-cultural studies (Lavik et al., 1999).

The HSCL-25 is a symptom inventory which measures symptoms of anxiety and depression. It consists of 25 items: 10 items measuring anxiety symptoms and 15 items for depression symptoms. The scale for each question includes four categories of response ("Not at all," "A little," "Quite a bit," "Extremely," rated 1 to 4, respectively). The 'anxiety & depression score' is the mean of all 25 items. Two sub-scale scores can also be calculated: the 'depression score' is the mean of the 15 depression items, and the 'anxiety score' is the mean of the 10 anxiety items.

Alden et al. (n.d.) recommend that, in the absence of formal validation of a culture specific version of the checklist, a cut off point of 1.75 in the mean scores is used to indicate whether a survivor is 'checklist positive'. Scores above this point indicate that a respondent has reported sufficient psychological distress, such that they are probable cases of minor psychiatric disorder and may benefit from psychiatric treatment. This cut-off point was used for case classification, so that the final measure is a simple dichotomy between 'case' and 'non-case'. Thus three caseness scores can be obtained 'anxiety & depression caseness' (whether checklist positive for some type of unspecified emotional distress), 'depression caseness' (whether checklist positive for a major depression), and 'anxiety caseness' (whether checklist positive for an anxiety disorder).

It has been consistently shown in several populations that the 'anxiety & depression' score is highly correlated with severe emotional distress of unspecified diagnosis, and the depression score is correlated with major depression as defined by the DSM-IV (American Psychiatric Association; 1994).

Trauma was measured using a modified version of the Harvard Trauma Questionnaire (HTQ; Mollica et al., 1993). The HTQ is a checklist designed for the assessment of trauma and torture relating to mass violence and their consequences and is similar in design to the HSCL-25. It inquires about a variety of trauma events, as well as the emotional symptoms considered to be uniquely associated with trauma. The HTQ has been used in clinical and research settings with patients and community-based populations of diverse cultural backgrounds. It is based on the Western perspective of trauma-related illness as described in the DSM-IV diagnostic criteria for PTSD.

In the first part, respondents are asked whether they had experienced 11 traumatic life events determined to have affected Somali refugees. Respondents who identify at least one event are asked to complete a second part comprising 16 trauma symptoms derived from the DSM-IV criteria for PTSD. Items relating specifically to brain injury and a request for a written description of the most hurtful event were omitted. These items are not required for the purposes of quantification of the extent of traumatic symptomatology (HTQ symptom score), and may have caused undue distress to respondents. The 'PTSD score' is the mean of these 16 items.

Scale cutoff points have not been established in this population, and an algorithm method was used as recommended by Mollica et al. (1999), that replicates DSM-IV criteria for diagnosis of PTSD. The algorithm for caseness included having experienced at least one traumatic event (criterion A), a positive response (3 or 4 on the HTQ) on at least 1 of the 4 re-experiencing symptoms (criterion B), at least 3 of the 7 avoidance and numbing symptoms (criterion C), and at least 2 of the 5 arousal symptoms (criterion D).

Social Exclusion was measured using an 8-item scale designed for the purposes of this study. It was based on the model of social exclusion developed by Duffy (1995) comprising four dimensions of social exclusion: social, cultural, economic and political. Two statements were designed to cover each dimension. Items were scored between 1 (not true) and 3 ('certainly true'). The development of this measure is necessitated by the absence of other appropriate measures of perceived social exclusion at an individual level.

Factor analysis (see Appendix 4) revealed two meaningful factors. 4 items measuring social and cultural exclusion formed one factor, whilst the two items measuring economic exclusion formed another factor. The two items measuring political exclusion did not load highly on either factor.

The 'social exclusion' score was calculated as the mean of the four items measuring social and cultural exclusion ('I am frightened of crime', 'I am harassed outside of my home', 'I am put down or harassed because of my race or nationality', and 'I am put down or harassed because of my religious beliefs'). The 'economic exclusion score' was calculated as the mean of the two items measuring economic exclusion ('I can afford good enough food and clothes' and 'I can afford to live comfortably (e.g. good enough quality housing, and can afford heating bills)'). The Cronbach's alphas (Cronbach, 1951) a measure of internal-consistency reliability, of these two scales were .91 and .93 respectively. In each case high scores indicate high levels of perceived exclusion.

Social Support was measured using a 7-item scale covering perceptions of the support provided by family and friends. This scale has been used as part of the Health Survey for England, and found to be closely related to psychological health (Bajekal and Purdon, 2001).



Use of Khat. Items covered whether participants currently use khat, their level of use, views on khat use and use of other drugs.

Views about Khat. Three questions were concerned with respondents' views about khat. They were asked their views as to whether khat use is a problem within their community, whether khat use has had a negative effect on their family and whether khat should be brought into Britain.

### *Data Analysis*

All dependent variables were screened for normality and outliers prior to analysis. Examination of the data found major departures from normality in the case of the 'anxiety & depression' score, depression score and anxiety score (positively skewed). Thus we had two options for the analysis: either to transform the data and use parametric methods; or to use non-parametric techniques. For all analyses we took the first option, and applied a square root transformation to these scores. This follows the recommendations of Rasmussen and Dunlap (1991) who showed parametric analysis of transformed data to have superior statistical power to non-parametric analysis or parametric analysis of raw skewed data. All tests of statistical significance are based on the transformed data, however we report means of raw scores to allow direct interpretation of results, in addition caseness rates are used to illustrate levels of psychiatric morbidity.

The author is aware of the nature of the distribution of the number of traumatic events experienced (which could take values between 0 and 11). A high number of respondents (28.2%) had experienced no events, but there were in addition a relatively high frequency of respondents identifying six and seven, and nine and ten events.

Therefore there is no reason to believe that any part of the distribution would exert an unduely high leverage on statistics, and the untransformed variable was used as a predictor in regression analyses. Nonparametric correlation co-efficients were used to test bivariate relationships involving this variable due to the ordinal nature of the data.

All statistical tests reported are two-tailed unless stated otherwise. No corrections have been made to account for the number of statistical tests used. The use of the Bonferroni correction to significance levels was considered, but rejected due to the increased likelihood of Type II errors, and the fact that each statistical comparison can be viewed as an independent test. Significance is generally indicated by  $p < 0.05$ . The reader is advised to refer to both significance levels and effect sizes when evaluating the results of statistical tests.

Data was not available on every item for all respondents. Percentages quoted in the text refer to the percentage of respondents for whom valid responses were available.

## **Results**

Characteristics of the sample as a whole are described first, followed by an exploration of relationships between demographic factors and both mental health<sup>1</sup> and khat use. The specific hypotheses are then evaluated.

### *Characteristics of the whole sample*

A total of 249 questionnaires were returned. Twenty-nine were discarded as they had not been correctly completed, or did not satisfy the inclusion criteria (namely respondents over 18 years of age, interviewer and interviewee of same sex). The

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<sup>1</sup> 'mental health' is used throughout the results section as an umbrella term describing the four measures of anxiety & depression, anxiety, depression, and PTSD.

respondents included in subsequent analyses numbered 220. UK census data for 2001 reports 1,306 individuals (of all ages) born in Somalia resident within Sheffield, based on this figure 16.8% of the Somali community within Sheffield were sampled.

The sample comprised 129 men (58.6%). The mean age of the whole sample was 36.47, SD = 14.02, range = 18 to 74. Ninety-three (42.3%) were married, 77 (35.0%) single, and 50 (22.7%) divorced, separated or widowed. The number of respondents who lived with family was 140 (63.9%), 72 (32.7%) lived alone, 7 (3.2%) lived with friends.

Just 5 respondents (2.3%) were born in England. Participants had moved to England between 1940 and 2003, the modal year of moving to England was 1990, 51.0% of respondents had migrated between the years 1989 and 1994. The mean age at which respondents moved to England was 25.77 years, SD = 13.45, range = 3 to 67. Forty four (20%) were separated from their spouse or children due to moving to England.

Forty nine (22.3%) were employed, 111 (50.5%) were unemployed, 44 (20%) were students, and 14 (6.4%) were retired. The most common reasons given for unemployment were language difficulties (42.6%) and the lack of appropriate qualifications (32.2%). Other reasons given were childcare commitments, that no jobs were available in the area, and sickness. Just 6 respondents (2.7%) reported that they were currently employed in skilled or professional occupations.

Limited information about changes in occupational status following migration was available for 81 respondents. This was based on most recent occupations in England and Somalia, and did not take account of whether respondents were currently employed or unemployed. Following migration 15 (18.5%) had experienced a drop in occupational status, 60 (74.1%) had approximately equivalent status, and 6 (7.4%) were in higher status occupations.



One hundred and six respondents (50.2%) had no formal education, 42 (19.9%) were educated to GCSE level or equivalent, 32 (15.2%) were educated to A-level or equivalent, 22 (10.4%) had a degree or equivalent level qualification, and 9 (4.3%) occupational or vocational training.

Overall 85 respondents (38.6%) reported using khat. Amongst those that used khat, the modal number of days per week on which they used khat was 4 (range = 1 to 7) and the average time spent chewing was 29.9 hours per week. The average number of bundles used per week was 9.4 (range 2 to 28), corresponding to an average expenditure of £28.34 per week (based on an average price of £3 per bundle).

Tobacco was used by 78 respondents (35.6%). Levels of use of other drugs were low: 15 respondents (6.8%) reported using alcohol, and 9 (4.1%) reported using cannabis. No respondents reported using amphetamine, cocaine, crack cocaine or heroin. Use of other drugs appeared to be associated with khat use. Sufficient numbers to allow valid statistical comparison were only available in the case of tobacco use. More khat users than expected also smoked tobacco ( $\chi^2(1) = 91.86, p < 0.001$ ): 75.3% of khat users smoked tobacco, whereas just 10.9% of those that did not use khat smoked tobacco.

Using the HSCL-25, 55 respondents (25.0%) were overall cases, 56 (25.5%) were cases for depression, and 66 (30.0%) were cases for anxiety. 22 (10.0)% of participants were checklist positive for PTSD.

The mean (*SD*) number of different types of trauma events reported by respondents was 4.7 (3.6). One hundred and fifty-eight (71.8%) respondents reported experiencing at least one type of event. The frequencies of reporting each type of event are shown separately for men and women in table 1 below. The prevalence of imprisonment, brain injury, torture and witnessing violence to others was higher for men than women.

Table 1. Percentage experiencing traumas by sex and significance test of association

Type of event/situation	Men (n=129)	Women (n=91)	ChiSq(1) and signif.
Forced to flee under dangerous circumstances	69.0%	59.3%	2.19
Confiscation or destruction of personal property	65.1%	56.0%	1.85
Disappearance, death or injury of loved ones	65.1%	56.0%	1.85
Lack of shelter, food or water	57.4%	60.4%	0.21
Witnessing violence to others	62.8%	47.3%	5.24*
Military combat or war-zone	58.9%	56.0%	0.18
Beating to the head or body	32.6%	23.1%	2.35
Torture	34.9%	19.8%	5.96*
Imprisonment	38.8%	13.2%	17.24***
Being forced to harm others	13.2%	17.6%	0.81
Brain injury	14.7%	2.2%	9.70**

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

### *'Anxiety & depression' and demographic factors*

Relationship between HSCL-25 scores and demographic variables are detailed below.

Unless stated otherwise, all results refer to 'anxiety & depression' scores and 'anxiety & depression' caseness.

There were no significant relationship between 'anxiety & depression' and sex ( $t(218)=1.40$ , ns). The mean score for men was 1.57 (25.6% caseness), and for women 1.46 (24.2% caseness). However, there were significant differences between men and women in terms of depression score ( $t(215)=3.13$ ,  $p<0.01$ ). The mean score for men was 1.60 (31.0% caseness), and for women 1.37 (17.6% caseness). There was a significant relationship between age and 'anxiety & depression' ( $r=0.42$ ,  $p<0.001$ ), older respondents tended to report poorer mental health.

There was a significant relationship between living situation and 'anxiety & depression' ( $t(210) = 2.54, p < 0.05$ ). Scores were higher for those who lived alone ( $M=1.68, 33.3\%$  caseness) compared those living with family ( $M=1.46, 22.1\%$  caseness).

There was a significant relationship between respondents' reason for moving to England and 'anxiety & depression' ( $F(2,209) = 3.25, p < 0.05$ ). 'Anxiety & depression' scores were higher among asylum seekers ( $M=1.59, 29.1\%$  caseness), than either those joining family ( $M=1.39, 15.6\%$  caseness), or those moving for education ( $M=1.35, 12.5\%$  caseness).

There was a significant relationship between separation from family and 'anxiety & depression' ( $t(58) = 4.04, p < 0.001$ ). Scores were higher for those who were currently separated from their spouse or children due to moving to England ( $M=1.88, 47.7\%$  caseness), compared to those who were not separated ( $M=1.44, 20.0\%$  caseness).

There was a significant relationship between employment status and 'anxiety & depression' ( $F(3,214) = 10.92, p < 0.001$ ). Students ( $M=1.16, 6.7\%$  cases) reported significantly better mental health than either retired ( $M=1.74, 35.7\%$  case), unemployed ( $M=1.66, 33.3\%$  case) or employed ( $M=1.48, 20.4\%$  case) respondents. This significant relationship between employment status and mental health remained after age was controlled for.

There was a significant association between change in occupational status and 'anxiety & depression' ( $t(17) = 3.4, p < 0.01$ ). Those who had the same or better occupational status ( $M=1.52, 27.3\%$  caseness) reported significantly better mental health than those who had experienced a drop in occupational status ( $M=2.27, 60.0\%$  caseness).

Significant relationships were found between 'anxiety & depression' and both marital status ( $F(2,217) = 9.90, p < 0.001$ ), and having children ( $t(216) = -3.70,$



$p < 0.001$ ). However, these relationships were non-significant having controlled for age using ANCOVA. There was no significant relationship between 'anxiety & depression' and either the length of time respondents had lived in England ( $r = -.12$ , ns), or education level ( $F(2,208) = 1.00$ , ns).

### ***PTSD and demographic factors***

There were no significant difference in PTSD scores between men ( $M = 1.71$ ) and women ( $M = 1.73$ ):  $t(109) = -0.14$ , ns. However, there was a significant association between PTSD caseness and sex ( $\chi^2(1) = 8.12$ ,  $p < 0.01$ ): Only 7.4% of men were cases, whereas 23.4% of women were cases. These apparently anomalous results reflect differences in the patterns of reporting individual symptoms: the PTSD score is the mean score on all 16 items, whereas caseness was determined by an algorithm method requiring endorsement of a specified number of re-experiencing symptoms, avoidance and numbing symptoms and arousal symptoms.

There was a weak, but significant relationship between age and PTSD scores ( $r = 0.19$ ,  $p < 0.05$ ), older respondents tended to report higher levels of PTSD symptomatology. There was a significant association between change in occupational status and PTSD scores ( $t(60) = 3.1$ ,  $p < 0.01$ ). Those who had experienced a drop in occupational status ( $M = 2.09$ , 28.6% caseness) reported significantly higher levels of symptoms than those who had the same or better occupational status ( $M = 1.57$ , 2.0% caseness).

There was a significant relationship between employment status and PTSD scores ( $F(3,152) = 3.04$ ,  $p < 0.05$ ). However, this relationship became non-significant after age was controlled for using ANCOVA. There were no significant relationship between PTSD scores and either marital status ( $F(2,154) = 1.53$ , ns), having children ( $t(155) = -1.46$ , ns), living situation ( $t(151) = 1.31$ , ns), reason for moving to England

( $F(2,153) = 1.20$ , ns), separation from family ( $t(154) = -1.67$ , ns), the length of time respondents had lived in England ( $r = -.09$ , ns), or education level ( $F(2,150) = 0.47$ , ns).

### *Use of khat and demographic factors*

There was a significant association between sex and khat use ( $ChiSq(1) = 72.3$ ,  $p < 0.001$ ). The majority (63.5%,  $n=80$ ) of men used khat, compared to just 5.7% ( $n=5$ ) of women. Age was related significantly to use of khat ( $t(211) = 2.35$ ,  $p < 0.05$ ). Khat users (mean age = 39.2 years), tended to be older than non-users (mean age = 34.6 years). There was a significant association between living situation and khat use ( $ChiSq(1) = 13.3$ ,  $p < 0.001$ ). A greater proportion of those living alone used khat (57.1% users), compared to those living with family (30.9% users). The way in which respondents entered the UK was related to khat use ( $ChisSq(2) = 7.5$ ,  $p < 0.05$ ): those entering as asylum seekers were more likely to use khat (45.6% users), than those who moved to Britain for education (31.3% users), or to join family (23.3% users). Separation from family due to moving to England was related to khat use ( $ChisSq(1) = 5.3$ ,  $p < 0.05$ ): 54.5% of those separated from family used khat, compared to just 35.5% of those who were not separated from family. There was a significant association between employment status and use of khat ( $ChiSq(3) = 20.6$ ,  $p < 0.001$ ). A higher proportion of employed and unemployed respondents used khat (53.2% and 46.8% respectively), just 11.9% of students used khat. There was a marginally significant association between change in occupational status and khat use ( $Chisq(1) = 3.2$ ,  $p < 0.1$ ). A higher proportion of those who had experienced a drop in occupational status were users of khat than expected (80% users), 54.7% of those with the same or better occupational status used khat.

There was no significant relationship between khat use and marital status ( $ChiSq$  (2) = 1.71, ns); having children ( $ChiSq$  (1) = 0.78, ns); the number of years living in the UK ( $t(201)$  = -0.35, ns); or level of education ( $ChiSq$  (2) = 2.50, ns).

### ***Mental health and experience of trauma, social support and exclusion***

Our first hypothesis is that mental health will be related to experience of trauma, feelings of social exclusion, and levels of social support. Correlations between measures of mental health, social support, exclusion (as well as khat use) are shown in table 2.

There was a highly significant correlation between 'anxiety & depression' and the number of types of traumatic event experienced by respondents ( $Spearman's\ rho = 0.40, p < 0.001$ ). Higher numbers of types of traumatic event were associated with poorer mental health. This relationship between mental health and trauma was stronger for anxiety scores ( $Spearman's\ rho = 0.49, p < 0.001$ ) than for depression scores ( $Spearman's\ rho = 0.32, p < 0.001$ ). A similar relationship existed between PTSD score and the number of types of traumatic event ( $Spearman's\ rho = 0.38, p < 0.001$ ).

Table 3 shows the proportion of respondents reaching caseness on different measures of mental health for each specific experienced trauma (note that PTSD scores and caseness were only calculated for those individuals who reported at least one traumatic event). The significance of associations between having experienced each type of trauma and caseness were testing using Chi Square statistics (d.f. = 1 in each case). All trauma experiences were significantly associated with both 'anxiety & depression' caseness and anxiety caseness. Witnessing violence to others, confiscation or destruction of personal property, being forced to flee under dangerous circumstances and disappearance, death or injury of loved ones were all significantly associated with



depressive caseness. Being forced to harm others and torture were significantly associated with PTSD caseness.

There was a significant relationship between 'anxiety & depression' and social support ( $r = -0.34, p < 0.001$ ). High levels of social support were associated with good mental health. This relationship was stronger for depression scores ( $r = -0.35, p < 0.001$ ) than for anxiety ( $r = -0.29, p < 0.001$ ). Social support was also related to PTSD scores ( $r = -0.25, p < 0.001$ ).

There was a highly significant association between 'anxiety & depression' and feelings of social exclusion ( $r = 0.35, p < 0.001$ ). The relationship between 'anxiety & depression' and economic exclusion was somewhat weaker ( $r = 0.21, p < 0.001$ ). Poor mental health was associated with high levels of perceived exclusion in each case. Anxiety scores were related to both social ( $r = 0.31, p < 0.001$ ), and economic exclusion ( $r = 0.30, p < 0.001$ ). Depression scores were related to social exclusion ( $r = 0.34, p < 0.001$ ) but not economic exclusion ( $r = 0.13, ns$ ). PTSD scores were related more strongly to economic exclusion ( $r = 0.42, p < 0.001$ ) than social exclusion ( $r = 0.27, p < 0.001$ ).

In summary, hypothesis 1 was confirmed: poor mental health was associated with experiencing a higher number of traumatic events, feeling excluded, both socially and economically, and lower levels of social support. These relationships held for both the anxiety and depression sub-scales and PTSD scores, except in the case of economic exclusion and depression scores.

Table 2: Correlations between mental health measures, social support, exclusion and khat use.

	Mean	SD	n	1	2	3	4	5	6	7	8	9	10
1. No. traumatic exp's	4.70	3.60	220										
2. 'Anxiety & depression' score	1.21	.22	220	<i>.40***</i>									
3. Depression score	1.21	.22	220	<i>.32***</i>	<i>.96***</i>								
4. Anxiety score	1.22	.24	220	<i>.49***</i>	<i>.92***</i>	<i>.77***</i>							
5. PTSD score	1.72	.65	157	<i>.38***</i>	<i>.82***</i>	<i>.76***</i>	<i>.80***</i>						
6. Social support	2.61	.58	220	<i>-.29***</i>	<i>-.34***</i>	<i>-.36***</i>	<i>-.29***</i>	<i>-.25**</i>					
7. Social exclusion	1.72	.69	220	<i>.13</i>	<i>.35***</i>	<i>.34***</i>	<i>.31***</i>	<i>.27***</i>	<i>.11</i>				
8. Economic exclusion	1.97	.79	219	<i>.39***</i>	<i>.21**</i>	<i>.13</i>	<i>.30***</i>	<i>.42***</i>	<i>-.43***</i>	<i>-.03</i>			
9. Khat use (no=0, yes=1)	0.40	.49	214	<i>.19**</i>	<i>.29***</i>	<i>.37***</i>	<i>.13</i>	<i>.15</i>	<i>-.26***</i>	<i>.13</i>	<i>.08</i>		
10. Bundles chewed/wk	9.45	6.15	83	<i>-.03</i>	<i>.33**</i>	<i>.37***</i>	<i>.23*</i>	<i>.22</i>	<i>.03</i>	<i>.44***</i>	<i>-.39***</i>	n/a	
11. Time chewing/wk (hrs)	29.92	21.06	84	<i>-.08</i>	<i>.26*</i>	<i>.30**</i>	<i>.15</i>	<i>.19</i>	<i>.10</i>	<i>.39***</i>	<i>-.42***</i>	n/a	<i>-.88***</i>

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ . Note: Spearman's non-parametric co-efficients are shown in italics for correlations involving the number of traumatic experiences.

Table 3: Percentage of those exposed to different trauma who are cases

Type of event/situation	Anx & dep case (n=220)	Anxiety case (n=220)	Depression case (n=220)	PTSD case (n=158)
<b>Forced to flee under dangerous circumstances</b>				
No	13.0**	10.4***	13.0**	0.0
Yes	31.5	40.6	32.2	15.4
<b>Confiscation or destruction of personal property</b>				
No	10.6***	8.2***	11.8***	4.3
Yes	34.1	43.7	34.1	15.6
<b>Disappearance, death or injury of loved ones</b>				
No	16.5*	15.3***	16.5*	13.0
Yes	30.4	39.3	31.1	14.1
<b>Lack of shelter, food or water</b>				
No	16.5*	13.2***	19.8	3.4
Yes	31.0	41.9	29.5	16.3
<b>Witnessing violence to others</b>				
No	11.1***	11.1***	11.1***	8.8
Yes	33.9	44.4	33.9	15.3
<b>Military combat or war-zone</b>				
No	17.2*	14.0***	20.4	6.5
Yes	30.7	41.7	29.1	15.7
<b>Beating to the head or body</b>				
No	19.7**	21.7***	22.9	10.5
Yes	38.1	50.8	31.7	19.0
<b>Torture</b>				
No	19.7**	21.7***	22.3	9.5*
Yes	38.1	50.8	33.3	20.6
<b>Imprisonment</b>				
No	20.3**	22.2***	22.8	11.5
Yes	37.1	50.0	32.3	17.7
<b>Being forced to harm others</b>				
No	21.9*	25.7***	23.5	10.4*
Yes	42.4	54.5	36.4	27.3
<b>Brain injury</b>				
No	23.1*	27.1**	23.6	13.1
Yes	42.9	57.1	42.9	19.0

\* p < .05, \*\* p < .01, \*\*\* p < .001



### ***Khat use and experience of trauma, social support and exclusion***

The second hypothesis is that khat use will be related to experience of trauma, feelings of social exclusion, and levels of social support.

There was a significant relationship between the number of types of traumatic event experienced by respondents and use of khat ( $M-W U = 4296, p < 0.01$ ). Khat users had experienced an average of 5.62 events, compared to 4.22 for non-users. This relationship remained significant after controlling for age and after controlling for sex using logistic regression. However, when both age and sex were controlled for the effect of the number of trauma types on khat use was very marginally non-significant ( $B = 0.10, Wald(1) = 3.82, p = 0.051$ ). This non-significant result should be treated with caution : it could be argued that it is inappropriate to control for sex in these analyses is problematic given the shared variance between sex and khat use.

There was no relationship between the level of use (either the number of bundles chewed or time spent chewing each week) amongst those that used khat and the number of types of traumatic event (see table 2).

Khat users reported that they received significantly lower levels of social support than non-users: ( $t(147) = -3.68, p < 0.001$ ). Mean social support score for users = 2.43, for non-users = 2.73. However, having controlled for age and sex using ANCOVA the relationship between khat use and social support was no longer significant. There was no relationship between the level of use amongst those that used khat and social support (see table 2).

Khat users reported significantly higher levels of social exclusion than non-users ( $t(210) = 1.99, p < 0.05$ ). Mean social exclusion scores for users = 1.84, for non-users = 1.66. This effect remained significant having controlled for age and sex using ANCOVA. Amongst those that chewed khat there was a highly significant relationship between level of use and social exclusion (for bundles/week  $r = .44, p < 0.001$ , for

time/week  $r = .39, p < 0.001$ ), these effects remained significant having partialled out the effects of age and sex. Increased levels of use were associated with high levels of social exclusion.

There was no significant difference in the levels of economic exclusion reported by khat users and non-users ( $t(211) = 1.14, ns$ ). Mean economic exclusion scores for users = 2.05, and for non-users = 1.92. This effect remained non-significant having controlled for age and sex using ANCOVA. However, amongst those that chewed khat there was a highly significant relationship between level of use and economic exclusion (for bundles/week  $r = -.39, p < 0.001$ , for time/week  $r = -.42, p < 0.001$ ), these effects remained significant having partialled out the effects of age and sex. Increased levels of use were associated with lower levels of economic exclusion.

In summary, hypothesis two was partially supported. Khat users reported experiencing a significantly higher number of traumatic events. Users reported significantly lower levels of social support than non-users, although this relationship disappeared after controlling for sex and age. High levels of perceived social exclusion were related to khat use and increased level of use amongst users. High levels of perceived economic exclusion were related to lower levels of khat use amongst users.

### ***Mental health and khat use***

The third hypothesis is that mental health will be related to khat use (and that khat use will be associated with poor mental health).

There was a significant difference in 'anxiety & depression' scores between respondents who used khat ( $M = 1.73, 32.9\%$  caseness) and those who did not ( $M = 1.40, 20.2\%$  caseness): ( $t(212) = 4.35, p < 0.001$ ). This effect remained significant after sex and age (and all demographic variables) were controlled for using ANCOVA.



For those respondents that used khat increased level of use was associated with poorer mental health: there was a significant relationship between 'anxiety & depression' and both the number of bundles chewed each week ( $r = .33, p < 0.01$ ) and the amount of time spent chewing each week ( $r = .26, p < 0.05$ ).

There was a stronger relationship between khat use and depression score ( $t(138) = -5.46, p < 0.001$ ) than anxiety score ( $t(212) = -1.90, p < 0.05$  using a 1-tailed test). The mean depression score for users was 1.79 (43.5% caseness) compared to 1.33 (14.0% caseness) for non-users. The mean anxiety score for users was 1.65 (37.7% caseness) compared to 1.49 (25.6% caseness) for non-users.

For those that used khat, the level of use was more strongly associated with depression score than anxiety score. This was the case for both the number of bundles chewed each week ( $r = .37, p < 0.001$  for depression;  $r = .23, p < 0.05$  for anxiety), and the time spent chewing each week ( $r = .30, p < 0.001$  for depression;  $r = .15, ns$  for anxiety).

PTSD scores were also related to khat use. Respondents who used khat ( $M=1.83$ ) had significantly higher PTSD scores than those who did not ( $M=1.64$ ):  $t(152) = 1.84, p < 0.05$  using a 1-tailed test. The significant relationship between khat use and PTSD score remained after controlling for all demographic variables using ANCOVA. This difference was not evident in the levels of PTSD caseness (9.4% for those using khat and 10.9% for non-users). There was no significant relationship between khat use and PTSD caseness ( $ChiSq(1) = 0.12, ns$ ).

There was a weak significant relationship between the number of bundles chewed each week and PTSD score ( $r = .22, p < 0.05$  using 1-tailed test). The relationship between PTSD score and the time spent chewing was not significant ( $r = 0.19, ns$ ).



In summary, the third hypothesis was supported: both the use of khat, and the level of use amongst users were associated with poor mental health. Relationships appear stronger with depression scores than anxiety scores. There was also a significant difference in PTSD scores between users and non-users.

### *The separate effects of trauma, exclusion, social support, and khat use on mental health*

Our final hypothesis is that trauma, exclusion, social support, and khat use will have separate effects on mental health. To test this hypothesis we used hierarchical regressions using both 'anxiety & depression' score and PTSD score as dependent variables.

In the first case, 'anxiety & depression' score was the dependent variable. The predictors were entered in five steps: firstly demographic controls (age and sex), secondly the number of traumatic experiences, thirdly social and economic exclusion, fourthly social support, and finally khat use.

Beta weights can be used to evaluate the relative contribution of each independent variable. Table 4 shows that poor mental health was related to (in order of relative contribution) older age ( $Beta = 0.33, p < .001$ ), lack of social support ( $Beta = 0.30, p < .001$ ), high social exclusion ( $Beta = 0.26, p < .001$ ), female sex ( $Beta = 0.22, p < .01$ ), khat use ( $Beta = 0.22, p < .01$ ), and a high number of trauma experiences ( $Beta = 0.15, p < .05$ ). Care must be exercised in interpreting these individual co-efficients given relationships between the independent variables (particularly sex and khat use).

Table 4: Regression analysis predicting 'anxiety & depression' score

Variable(s)	<i>B</i>	<i>Beta</i>	<i>R</i>	<i>R</i> <sup>2</sup> (Change)
Age	0.01***	0.33		
Sex (1=male, 2=female)	0.10**	0.22	0.42	0.18***
No. trauma experiences	0.01*	0.15	0.52	0.09***
Social exclusion	0.08***	0.26		
Economic exclusion	0.03	0.11	0.58	0.08***
Social support	-0.11***	-0.30	0.64	0.07***
Khat use (no=0, yes=1)	0.10**	0.22	0.66	0.03**

\*  $p < .05$ , \*\*\*  $p < .001$

In the second case, PTSD score was the dependent variable. Again the predictors were entered in two steps: firstly demographic controls (age and sex), secondly the number of traumatic experiences and khat use.

Table 5 shows that higher PTSD scores were related to (in order of relative contribution) economic exclusion ( $Beta = 0.36, p < .001$ ), female sex ( $Beta = 0.34, p < .001$ ), khat use ( $Beta = 0.25, p < .01$ ), high social exclusion ( $Beta = 0.20, p < .01$ ), a high number of trauma experiences ( $Beta = 0.20, p < .05$ ), and lack of social support ( $Beta = -0.16, p < .05$ ). Again, individual co-efficients may be misleading given relationships between the independent variables.

Table 5: Regression analysis predicting PTSD score

Variable(s)	<i>B</i>	<i>Beta</i>	<i>R</i>	<i>R</i> <sup>2</sup> (Change)
Age	0.01	0.13		
Sex	0.44***	0.34	0.19	0.04=
No. trauma experiences	0.05*	0.20	0.42	0.14***
Social exclusion	0.19**	0.20		
Economic exclusion	0.32***	0.36	0.57	0.15***
Social support	-0.18*	-0.16	0.59	0.02*
Khat use (no=0, yes=1)	0.33**	0.25	0.62	0.04**

=  $p < .1$ , \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

### *Views about khat*

Respondents were asked to what extent they agreed with the statement that 'khat use is a problem within my community'. Overall 80.4% of respondents responded that this was 'certainly true', 14.6% that it was 'partly true', and 5.0% that it was 'not true'.

There was no significant association between views as to whether khat was a problem within the community and use of khat ( $Chisq(2) = 4.12$ , ns). The majority (74.1%) of users responded that the statement was certainly true, and 18.8% of users responded that it was partly true. There was a significant association between views and sex

( $ChisSq(2), = 8.26, p < 0.05$ ): More women than expected endorsed this statement:

88.9% of women and 74.4% of men agreed that the statement was 'certainly true'.

A second question asked whether khat use has had a negative effect on the respondent's family. Overall 58.7% of respondents responded that this was 'certainly true', 17.4% that it was 'partly true', and 23.9% that it was 'not true'. There were no



significant associations between views as to negative effects on family and either sex ( $Chisq(2) = 1.59$ , ns), or use of khat ( $Chisq(2) = 1.12$ , ns).

A third question asked 'do you think khat should be brought into Britain?' Overall, just 28.1% thought it should, 71.9% thought khat should not be brought into Britain. There was a significant association between views and use of khat ( $Chisq(1) = 8.03$ ,  $p < 0.01$ ). A large majority (78.3%) of non-users thought that khat should not be brought into Britain, whereas 60.2% of users thought that khat should not be brought into Britain. The relationship between views and sex was marginally significant ( $Chisq(1) = 3.05$ ,  $p < 0.10$ ), 76.4% of men thought that khat should not be brought into Britain compared to 65.6% of women.

## **Discussion**

The results will now be systematically discussed in terms of their strength, meanings, and relation to the existing literature. This discussion focuses on levels of psychiatric morbidity and the relationships between mental health and demographics, pre- and post-migration factors, and khat use. Methodological issues and the future research agenda are also discussed. Clinical implications are considered throughout the discussion and summarised at the end.

### ***Levels of psychiatric morbidity***

Levels of PTSD caseness in the sample as a whole were 10%. This figure suggests that a small but significant minority of the Somali population are experiencing marked difficulties consistent with a diagnosis of PTSD. This PTSD caseness rate is broadly consistent with published estimates of the prevalence of PTSD in epidemiological refugee samples. For example, Mollica et al. (1993) found that 15% of Cambodian residents in a refugee camp suffered from PTSD.

Levels of 'anxiety & depression' caseness as measured by the HSCL-25 were 25.0%, anxiety caseness was 30.0%, and depression caseness 25.5%. It is likely that these individuals are experiencing a significant level of emotional distress. These levels are similar to those reported using the same measures in a sample of asylum seekers of different nationalities in Australia: caseness levels of 28.2%, 23.1%, and 33.3% respectively (Silove et al., 1997).

### *Demographic variables and mental health*

This section discusses relationships between mental health and both sex and age. Other demographic variables are considered as either pre- or post-migration factors below.

The findings regarding sex and mental health are equivocal. Although there was no relationship between sex and the combined measure of anxiety and depression, depressive symptomatology was more common in men. Female sex was associated with higher incidence of PTSD caseness, but there was no relationship between sex and PTSD symptom scores.

There is little existing research addressing the relationship between sex and mental health in Somali migrants. Bhui, Abdi et al. (2003) report no significant association between sex and anxiety and depression caseness, or probable psychosis, but suicidal thinking was more common in men. Robertson (2002) reports views within the Somali community that men may be more susceptible to distress, while mental health providers have reported that women and children more commonly present with emotional distress (CVS Consultants, 1999).

The finding of higher levels of depressive symptomatology amongst men as compared to women in this study is contrary to the finding commonly reported in the literature that women suffer higher levels of depression than men (e.g. Weissman & Klerman, 1977). The reason for this discrepancy is unclear, it is possible that social



factors peculiar to the experience of Somali migrants in the UK, such as loss of role status amongst men, may be responsible for the sex differences found in this study.

Age was related to both 'anxiety & depression' scores and PTSD scores. In each case older age was related to high levels of symptomatology, suggesting that older Somalis are at most risk of developing psychological health problems. Older Somalis are likely to experience significant difficulties accessing statutory services due to cultural and language barriers, and services must attempt to meet their needs.

### ***Premigration factors and mental health***

The levels of exposure to trauma among the sample were high, with 72% of respondents having experienced at least one significant trauma. Men were generally more likely to have experienced violent acts (torture, brain injury and witnessing violence to others) as well as imprisonment.

The relationship between trauma and psychological outcome was strong. Experiencing higher numbers of trauma types was related to increased levels of anxiety, depression and PTSD symptomatology. Each individual trauma events was a risk factor for 'anxiety & depression' and anxiety caseness. The significant effect of number of types of trauma experience on 'anxiety & depression' score and PTSD score remained after controlling for age, sex, social support, exclusion, and khat use.

These findings suggest that trauma is an important factor contributing to mental distress experienced by members of the Somali community. Although just 10% of the sample met criteria for PTSD diagnosis, trauma experiences appear to have an impact on symptoms of depression, and in particular anxiety in the community as a whole. Services should be able to respond sensitively and flexibly to an individual's needs and desire for therapeutic work focused on trauma related symptoms.



Individuals stated reasons for moving to the UK were related to 'anxiety & depression'. Caseness levels among asylum seekers were approximately twice those among people joining family, or moving for education. This relationship may reflect the ongoing impact of circumstances leading to migration, or the impact on psychological well-being of post-migration factors associated with asylum seeker status, such as poverty, conflict with immigration authorities, and concern about deportation.

### ***Post-migration factors and mental health***

A wide range of post-migration factors were found to be related to mental health, supporting previous research indicating an important role of post-migration factors in the mental health of refugees (Lie, 2002; Silove et al., 1997).

The significant relationship found between employment status and mental health supports previous research in the UK linking unemployment with anxiety and depression amongst many other negative outcomes (Smith, 1992), as well as research in traumatised refugee populations (Eastmond, 1998). More respondents had experienced a drop as opposed to a rise in occupational status since moving from Somalia (although this data has a number of methodological limitations). Loss of occupational status was associated with both increased 'anxiety & depression', and PTSD symptoms. This result supports qualitative findings that loss of role status is an important cause of mental health problems amongst Somalis (Cole & Robinson, 2002; Silveira & Allebeck, 2001). These findings are particularly concerning given the high levels of unemployment in the sample. Just 22% of the sample reported being employed, representing a high level of socio-economic disadvantage within the community as a whole.

Living alone and separation from family were associated with anxiety and depression symptoms. These relationships may have been due to concerns about the

welfare of relatives (Silveira & Allebeck, 2001), perceived obligations to provide financially for relatives in Somali (Rousseau et al., 1998), and lack of social support. Social support was a protective factor for anxiety and depression, and PTSD. This supports previous research findings in both general population (Bloom, 1990), and refugee samples (Gorst-Unsworth & Goldenberg, 1998; Hauff & Vaglum; 1995; Lie, 2002). It is likely that improving levels of social support will have a positive impact on mental health, and there is evidence for the overall usefulness of social support interventions (Hogan et al., 2002). Efforts to engage individuals with their family and community networks, as well as supporting the reunion families separated by migration, may be effective interventions promoting good mental health.

Feelings of social and economic exclusion were related to both anxiety and depression, and PTSD symptoms. Social as opposed to economic exclusion was related most strongly to anxiety and depression, whereas economic exclusion was related most strongly to PTSD symptoms.

These findings as to the importance of a range of post-migration factors suggest that holistic approaches addressing social and economic issues as well as the provision of specialist mental health care (Watters, 2001) may be the most effective in promoting well-being.

### ***Khat use and mental health***

The relationship between khat and mental health found in the present study appears clear. Using khat is associated with high levels of anxiety and depression, and PTSD symptoms, over and above the impact of prior trauma, exclusion and social support. In addition, there is some evidence that high levels of use may be particularly problematic: levels of use are related to anxiety and depression, and PTSD symptoms amongst users.

The existence of a causal link between khat use and poor mental health has, however, not been established. Khat users reported having experienced a greater number of traumatic events, and were more likely to have entered the UK to seek asylum. It is possible that khat use may represent a way for some of dealing with past trauma, or 'self-medication' by individuals with mental health difficulties. In addition, the observed relationship between khat use and mental health may be due to relationships with unmeasured third variables such as family problems, concerns about the political situation in Somalia (Robertson, 2002), and cultural alienation or community fragmentation (Nabuzoka & Abdi Babadhe, 2000). Khat use was more common amongst men, and older age groups. There is weak evidence for a relationship between a drop in occupational status and khat use. Khat was more commonly used by those that lived alone, who were separated from family, and who reported high levels of social exclusion and low levels of social support. These relationships suggest that khat may be used as a way of dealing with feelings of isolation and boredom, and suggest that efforts to engage individuals with their family and community networks, as well as supporting the reunion families separated by migration, may reduce levels of problematic khat use and associated poor mental health.

The finding of a relationship between khat use and psychiatric morbidity supports views within the Somali community (Prasad, 2002; Robertson, 2002), and within khat users themselves (Griffiths et al., 1997) linking khat with poor mental health. However, other researchers have failed to find a link between khat use and mental health in Somali in the UK (Ahmed & Salib, 1998; Bhui, Abdi et al., 2003), as well as in a native Yemeni population (Numan, 2004). These three studies were limited in that they did not examine relationships between level of use and mental health amongst users. Ahmed and Salib's sample size was small leading to reduced statistical



power, however reasons for the contradictory findings of the present study and that of Bhui, Abdi et al. are unclear.

Given the consistent relationships found in the present study between levels of khat use and mental health, it is possible that a proportion of khat users in this study were experiencing symptoms of acute psychosis associated with high levels of use (Cox & Rampes, 2003). Questions relating to prevalence of psychotic symptoms cannot be addressed by the current study, as items relating to such symptoms were not included in the questionnaire. Cox and Rampes review evidence suggesting that full remission of psychotic symptoms associated with khat use commonly occurs without neuroleptic treatment. The psychiatric care of these patients within the UK may be problematic, as patients with a 'dual diagnosis' of khat misuse and psychotic illness may not be recognized by substance misuse services with little experience of khat, and therefore are likely to present to general adult psychiatry services.

The study was limited in that it did not adequately explore the impact of khat use on family and social life. There was evidence that khat use was associated with increased levels of social exclusion, and lower levels of social support. Amongst users higher rates of use were related to lower levels of economic exclusion, suggesting that economic factors may restrict levels of use. However, the direction of any causal relationships is unclear. It is possible that negative impacts of khat on different aspects of social functioning are more of a problem within the Somali community than any relationships with mental health per se.

Respondent's views on khat were particularly interesting. Ninety five per cent of the sample as a whole, responded that the statement 'khat use is a problem within my community' was either 'certainly true' or 'partly true'. Seventy six percent responded that the statement 'khat use has had a negative effect on my family' was either 'certainly true' or 'partly true'. The information gained from these attitudinal questions

is limited in that the nature of any negative effects is unspecified, i.e. respondents were not asked to distinguish between effects on mental health, physical health, economic status, social functioning, relationships etc. Just 28% thought that khat should be brought into Britain. The strength of these negative views towards khat supports evidence of concerns within the Somali community concerning the impact of khat use (Allen, 2002; Bullivant et al., 1995; Nabuzoka and Abdi Babadhe, 2000). The Home Office are currently investigating the health impacts of khat, and its current legal status. The views of the Somali community as to the problems associated with khat, and the best way to tackle these problems should be considered as an integral part of any changes in government policy.

It can be argued that it is impossible to separate the impact of khat from the cultural and social situation in which it used (Stevenson et al., 1996; Numan, 2004). Stevenson et al. suggest that a continued desire to use khat should be seen as part of the community reviving previous ways of life, and that through khat use migrants are able to preserve distinct identities within culturally diverse communities. Bearing these arguments in mind, the current study suggests that the use of khat by members of a Somali community within an unfamiliar setting, in a socio-economically handicapped position and culturally isolated state is associated with poor mental health and possibly other negative outcomes. Where use has become problematic, interventions assisting users in harm reduction and changing patterns of use may be beneficial.

### *Methodological issues*

Some data is available with which to assess the representativeness of the sample.

Comparison with 2001 census data for England and Wales, relating to individuals born in Somalia, suggests that the present sample was somewhat biased towards male respondents. Census data reports that females made up 58% of those over the age of 16,

whereas just 41% of the present sample were female. Thus, the present sample was biased towards men, which should be borne in mind when generalising the demographic profile of the sample, and levels of psychological distress.

Levels of employment and khat use among study participants were broadly similar to those reported elsewhere. The level of employment in the current sample (22%) was somewhat higher than that reported by the 2001 Census (8.6% employed), but similar to that in Bhui, Abdi et al's (2003) random community sample in London (18% employed). Although effort was made to include khat chewers and non-chewers amongst the Somali interviewees, certain pockets of the community, e.g. frequent chewers, may have been more difficult to reach and therefore been under-represented in our sample. However, levels of khat use were very similar to those found in the only study of a UK based epidemiological sample (Bhui, Abdi et al., 2003). In the present study 63.5% of men, and 5.7% of women reported using khat (compared to 62.6% and 16.9% respectively in Bhui, Abdi et al's study). The differences in the levels of use amongst women reported may represent geographically different patterns of use, sampling biases, or differential impacts of stigma associated with khat use amongst women. Amongst users, levels of use in the current sample appear very similar to those reported by Griffiths et al. (1997): the mean weekly expenditure of £28 was the same in both studies.

Recall bias and inferences of reverse causality cannot be adequately addressed within this cross-sectional study, but are better investigated using longitudinal designs.

Language barriers, and difficulties in accessing members of the community were addressed by the use of translated questionnaires and bilingual Somali interviewees. However, concerns regarding confidentiality, and stigma associated with mental illness within the Somali community may have led to under-reporting of symptoms.



It is difficult to gauge the validity of the mental health and trauma measures used in the study. The applicability of Western diagnostic measures in non-Western cultures is the subject of much debate (Summerfield, 2001), and the conceptual inequivalence of the Somali and English languages creates difficulties for the translation and cultural validity of measures (Bhui, Mohamud et al., 2003). The measures have not been formally validated in a Somali population, and because clinical interviews were not included in this study it is unclear to what extent self-reported mental health symptoms would match clinical diagnoses. In the case of the measure of PTSD a multi-dimensional classification algorithm based on DSM-IV was used in order to closely match the process of clinical diagnosis (Mollica et al., 1999). The measures of mental health used were the best available for the purposes of this study: both the HSCL-25 and the HTQ were developed for the purpose of assessing symptoms of distress amongst culturally-diverse refugee populations, and have been widely used in clinical and research settings with patients and community-based populations of diverse cultural backgrounds (e.g. Lavik et al., 1999; Lie, 2002; Mollica et al., 1999; Silove et al., 1997). In this study, differential relationships between measured variables and the three measures of mental health: anxiety, depression and PTSD scores suggest that the measures were able to distinguish between different dimensions of distress.

The measure of perceived social exclusion was developed for the purposes of this study given that no other appropriate measures existed. The only existing measure of perceived social exclusion (Bajekal & Purdon, 2001) is considerably longer than the simple 8-item scale that was used, and did not measure the effects of poverty or racism. The two scales used appear valid and reliable: they have clear face validity, the relationships found with mental health are evidence for their predictive validity, and internal consistencies were high. A more extensive evaluation of the reliability and validity of these scales is outside the scope of this study.

### *Future research agenda*

Further research directed towards investigation of links between khat use and mental health is required given contradictory findings between the current study and previous research

This research has highlighted the lack of appropriately validated measures of mental health among Somalis. Measures are crucial in assessing recovery and performance of services and the development and validation of such measures is needed. The study highlights the importance of perceived social and economic exclusion in mental health. Future mental health research in socially excluded groups would benefit from the development and validation of culturally appropriate methods of measuring exclusion.

The study identified some evidence for relationships between sex and mental health, although the observed relationships were complex. The differential impact of sex on PTSD caseness and symptom scores suggests sex differences in the pattern of response to individual items within the scale. Future research should examine differences between men and women's understandings of psychological health, and sex differences should be explicitly considered in the development of culturally-appropriate measures of mental health.

The study identified widespread negative views within the Somali community regarding khat. Future qualitative investigations should further explore the views of both male and female, users and non-users as to the impact of khat within their community. These views will be vital in devising and providing effective interventions to reduce problematic correlates of use.

## *Clinical Implications*

- Holistic approaches addressing social and economic issues as well as the provision of specialist mental health care may be the most effective in promoting well-being.
- Trauma is an important factor contributing to mental distress experienced by members of the Somali community. Services should be able to respond sensitively and flexibly to an individual's needs and desire for therapeutic work focused on trauma related symptoms.
- Efforts to engage individuals with their family and community networks, as well as supporting the reunion families separated by migration, may be effective interventions promoting good mental health.
- Older Somalis are likely to experience significant difficulties accessing statutory services due to cultural and language barriers, and services must attempt to meet their needs.
- People who have entered the country as asylum seekers appear at particular risk of developing psychological difficulties. Services must be able to meet the needs of this particular group.
- A significant number of the Somali population may experience psychological and other difficulties associated with khat use. Where use has become problematic, culturally-informed interventions assisting users in harm reduction and changing patterns of use may be beneficial.



## Conclusions

Between one quarter and one third of respondents reported levels of anxiety and depression symptoms suggestive of significant levels of emotional distress. One in ten respondents reported symptoms consistent with a diagnosis of PTSD.

The study has identified a number of risk factors for poor psychological outcome. Older age, living alone, moving to England as an asylum seeker, separation from family, and loss of occupational status were related to increased levels of anxiety and depression symptoms.

Levels of exposure to trauma among the sample were high, and the relationship between trauma and psychological outcome (symptoms of both anxiety and depression, and PTSD) was strong.

Khat use was widespread amongst male respondents. Khat use was associated with a number of negative life events including living alone, having been an asylum seeker, and separation from family. Views on khat use within the sample were generally negative: a large majority of all respondents (and khat users) felt that khat use was a problem within their community, had had a negative effect on their family, and should not be brought into Britain.

Experience of trauma, high levels of social exclusion, high levels of economic exclusion, low levels of social support, and use of khat were all independently related to increased levels of anxiety and depression symptoms. Similarly, trauma, social exclusion, (but not economic exclusion), social support, and use of khat had independent significant effects on PTSD symptoms.

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## **Critical Appraisal**

This critical appraisal is a commentary on the process of conducting the research. It begins with a brief chronological account of the research process from my own research background and the origins of the research through to data analysis and write-up. The critical appraisal concludes with a discussion of motivation and personal learning.

## **Background**

I have past experience of conducting primarily quantitative research projects after completing my undergraduate degree. I completed an MPhil, and worked for two years in a university research post. My memories of these times are not all positive: I struggled to varying degrees with maintaining interest and motivation, and experienced disappointment when other researchers and potential target audiences were not interested in the 'fruits of my labours'. These experiences provide the context for the beginnings of this research. Although I was fairly confident with my academic abilities in this area (and in particular quantitative methods), I was not initially excited by the prospect of a long and demanding research commitment. I was aware that of primary importance to me was to choose a topic that I was interested in, and one with a clear practical application for the research work.

The course 'research fair' in summer 2002, focused my mind on the task ahead, and increased my anxieties, but did not provide me with any clear idea as to an area I would like to research.

## **Origins of the research**

The area for the investigation was introduced to me during a discussion with the person who would later become my NHS supervisor, in September 2002. The research

question identified at this time related to the impact of khat on mental health among Somalis. My supervisor had links with a local Somali mental health charity, Somali Mental Health, and was aware of their interest in this area. I was initially excited by the community-based nature of the research, the involvement that would be required with members of the Somali community, and the fact that the impetus behind the question came from within the community itself. There followed a brief discussion with a potential university supervisor, and the submission of the Initial Research Proposal in October, 2002.

### **Initial Planning**

The time from October 2002 until February 2003 was spent writing the full research proposal for submission to the University Research Sub-Committee. During this time I met with my NHS and University supervisors, and was introduced by my NHS supervisor to a mental health worker at Somali Mental Health, who would become the most important contributor to the research process. I also attempted to meet with a number of members of the Somali community, and contact other researchers in the area, with mixed success.

These meetings and subsequent thinking raised my awareness of the potential difficulties inherent in the proposed research. There may be difficulties for a white, British professional in engaging the Somali community in the research. Successful completion of the work would require the close collaboration of members of the Somali community. In addition, language barriers would necessitate the translation of measures and/or the use of bilingual interpreters or interviewers. My university supervisor took a very realistic approach to these difficulties and made me think long and hard about the viability of the research before committing myself to the project.



At this time I was also made aware of the possibility of gaining additional funding for the research from Sheffield Health and Social Research Consortium (part of Sheffield Care Trust). I contacted the consortium by telephone and was informed that they would look favourably on an application if I could submit my protocol within the next two days. There was underspend within their research budget as the end of the financial year approached, and the proposed research fitted within one of their research priorities: the mental health needs of ethnic minority and excluded groups. Thus, a period of intense work resulted in the submission of the protocol to the consortium, and a request for additional funding of £2228 to pay for Somali interviewers to complete research interviews (the original intention had been to rely on the goodwill of the members of the Somali community to conduct interviews on a voluntary basis). My funding request was approved provisional on obtaining the approval of the University Research Sub-Committee, and the appropriate ethics committee.

The full research proposal was submitted to the University Research Sub-Committee in March 2003. The reviewers felt that the study was interesting and potentially very important, and made a number of relatively minor points that should be addressed prior to ethics submission.

### **Refining the research design**

Over the next months I met with a number of important contacts including members of the Somali community, Sheffield Drugs Action Team, and Sheffield Black Drugs Service. These meetings encouraged me that there were a significant number of parties interested in the research, which helped my own motivation. However, these meetings also suggested a number of important areas that my proposed research design would not measure, such as the impact of khat on the families of users, and views on khat within the community which could only be adequately investigated using qualitative methods.

At this time it was vital to be realistic about what was achievable within the limited time available. This made me aware for the first time of a delicate balancing act: that between my needs of producing a research thesis that would meet the requirements of the course, the needs of the Somali community for an investigation that was useful and relevant to them, and the resources that were available (funding, my time, and time and skills within the Somali community).

These discourses led to a finalised research protocol that was submitted to the North Sheffield Local Research Ethics Committee. I attended the ethics committee in October 2003, together with my NHS supervisor. The only question raised was to the validity of the measures of mental health within a Somali population. We stressed that a pragmatic approach was required: that no appropriate measures formally validated within a Somali population were available, and that a formal validation was outside the scope of the project. The proposal received a positive review, and only minor changes to the protocol were required.

Following receipt of ethics approval, the planning of the implementation of the research could begin. A small steering group was formed comprising two members of Somali Mental Health, a member of a local Somali community association, and myself. The steering group formally met on three occasions. In addition, I attended weekly meetings at Somali Mental Health. At these meetings, practical issues relating to the implementation of the research protocol were discussed. These included questionnaire translation, ensuring questionnaires were completed correctly, how to access participants, informing potential participants about the research, the 'ownership' of the research and ways in which the findings would be used, how to select and pay interviewers, and training interviewers to administer the questionnaire.

One issue of particular importance at this time was the payment of interviewers. Members of the steering group had raised concerns about the level of payment that I had

proposed (£10 per hour based on 30 minute interviews), and the time taken to access participants and complete interviews. At one meeting with potential interviewers the question of the level of payment was raised, with one interviewer showing evidence of being paid at a rate of £25 for equivalent work for another university. Somali Mental Health and I endeavoured to secure additional funding in order to make rates of pay more attractive. Somali Mental Health secured £800 additional funding from the local Drugs Action Team, and I submitted a request for further funds to Sheffield Health and Social Research Consortium following discussion with my supervisors. My request for total funding of £5455 was granted in January 2004. This figure allowed payment of interviewers at a rate of £20 per questionnaire, and the employment of an experienced freelance Somali Community Trainer to assist at a training day.

This time was a particularly stressful one for me. It felt as if the future of the research hung in the balance on a number of occasions, with its continuation being determined by funding decisions over which I had little control. I seemed to be constantly in contact with management accountants and payroll officers negotiating the minutiae of the budget and methods of payment. I have not previously been responsible for managing a project budget and had to learn very quickly about many aspects of this from overheads, national insurance contributions, and both NHS and University research management protocols.

Increased involvement of members of the Somali community in the planning process led to a decrease in the control I had over the decision making processes, and at meetings animated discussions would take place in Somali, of which I could make no sense. It was at this time that I had to place a lot of trust in my Somali colleagues, although I had no doubts about their commitment to the research.



## **Training**

Ten members of the local Somali community had been selected and asked to assist in completing research interviews. They were invited to a training day held on University premises, in January 2004. I met with a freelance Somali Community Trainer, and together we constructed a plan for the day. Part of the day was led by him, and concentrated on general considerations in performing research interviews, potential sources of bias, and accessing participants. Again, a large part of the discussions occurred in the Somali language, and I had to sit back and trust that my Somali colleagues were addressing the issues in an appropriate way. The remainder of the session was led by me and covered the Somali and English forms of the questionnaire, confidentiality and informed consent, and practice interviewing.

Organising this day was another stressful time. Final funding arrangements were ongoing, my university supervisor was on leave, and I was working on two clinical placements at the same time. However, the day proved to be a success. I was impressed and relieved by the enthusiasm and commitment of the interviewers to the project, and confident that I would obtain the quality of data that I needed.

This time was a watershed: the planning and organisation were all but behind me, and it finally felt that the project would be completed, and that data would be collected. I also felt a large degree of personal satisfaction at this time: that I had succeeded in planning and implementing a complex research project; that a number of members of the Somali community had received training and experience in research skills (as well as monetary reward) which may be of use in their future working lives; and that the research findings would have an important and useful contribution to the understanding of well-being amongst Somalis.

## **Data Collection**

Following the training day, interviewers each piloted one questionnaire. We then met and discussed any problems that had occurred and revisions to the questionnaire that were needed. Data collection then began. Interviewers were given a six week period to complete 25 questionnaires each. Completed questionnaires were returned to Somali Mental Health on a regular basis, and I checked returned questionnaires as they arrived to ensure that they were being completed correctly. In a small number of instances we had to contact interviewers to discuss ways in which questionnaires were being completed, and a small number of completed questionnaires were discarded because of concerns about the accuracy of information.

At this time my colleagues at Somali Mental Health took the lead in liaising with interviewers and dealing with minor problems as they arose. Their involvement was a great relief during this busy time.

## **Data analysis and write up**

Following receipt of all questionnaires at the beginning of March 2004, the payment of interviewers (which was organised through Somali Mental Health), and data input, data analysis could finally begin. I was confident about this part of the research process, and enjoyed statistical exploration of data. Preliminary results were interesting, and relationships within the data generally as I had hypothesised. These results were discussed with my colleagues at Somali Mental Health who were also enthusiastic.

I then began the long task of writing up the research thesis. I experienced this as a fairly lonely pursuit, spending long hours in front of a computer with little input from outside. As time moved on, and my knowledge of the data, and the related research grew, I began to take real pleasure in the work. I could see a potentially valuable piece

of research taking shape. In contrast, I found the final days of the write-up as a frustrating time, as the minor tasks seemed to take an inordinately long period of time.

I feel that practical application of the research is crucial, and for the future, I plan to write a more accessible account of this work together with Somali Mental Health, for dissemination to health professionals and members of the Somali community. We are also planning a 'launch day' to inform local agencies about the work and its clinical implications.

### **Motivation, managing workload and supervision**

The proportion of my time devoted to the research varied throughout the course of the two years from inception to completion. At times deadlines seemed a very long way off, and I would prioritise other areas of my work and home life. At other times completing specific tasks related to the research was of primary importance. There were times when it felt like the research would never be completed, and I would divert my attention to other aspects of my work and home life. At times I took personal enjoyment from the work and it would work productively and pleasurably. At other times anxiety about ever completing the project led to grim determination.

I learnt to work at times when my motivation was high, and influence my own motivation by setting targets and rewards for completing parts of the work. This had led to an increased confidence in my own abilities to manage and complete complex and difficult tasks more effectively.

Meetings with the workers at Somali Mental Health were always enjoyable as well as motivating. Regular meetings at planning stages and during data collection helped maintain my motivation, and highlighted potential problems, and solutions. The high degree of involvement from colleagues at Somali Mental Health contrasted with limited input from my supervisors throughout the course of the project. In hindsight, it



may have been beneficial for increased frequency of contact, in order to anticipate future problems before they arose, maintain motivation, and contain my own anxieties about completion of the project. I noticed how upcoming meetings would focus my mind on issues to be addressed at a busy time in my working and personal lives. Part of the lack of supervisory involvement may be down to my own relatively high competence in terms of research and organisational skills, but may also reflect a degree of reluctance in seeking help unless it is urgently required. This 'get on with it' style can be potentially unproductive as opportunities to gain useful input may be missed.

### **Personal learning**

Writing this critical appraisal has highlighted to me the extent of my investment in this research over the past two years. There has been a large investment of time, and emotional energy in the research and it has increased my own motivation for conducting clinically relevant research in the future.

The work has involved forming, and maintaining effective working relationships with members of the Somali community without whom the research would not have been possible. This has been my first real experience of working so closely with voluntary sector organisations, and working with members of a different culture. I have learnt a lot about the experience of Somalis in the UK, both through my reading and talking with contacts, and I have made friends from within the community. I believe that this research has provided with an opportunity to meet with and learn from members of a different community with whom I may not have otherwise have had any contact. At times this 'cross-cultural' work has required a flexible approach, adjusting own ways of working. It has highlighted the importance of engagement and joining with other workers, and the balance between showing interest in different cultural views and practices whilst maintaining respect. It has made me more aware of the benefits of

making links with the voluntary sector, and how effective interventions for psychological difficulties may be best provided from within such organizations.

In considering the literature on different cultural conceptualisations and expressions of mental health, I realised that my own research could be criticized for its application of Western psychiatric views, encapsulating distress in terms of PTSD. I am reminded of a meeting I had with a Somali health professional who expressed a high degree of doubt as to whether many Somalis in the UK still suffered PTSD, so long after the end of the civil war in Somalia, and my own reaction to that. I am now more aware of the influence of my own culture and training as a clinical psychologist on my views of mental health and 'normal' responses to trauma, and will be much more open to a range of different views on distress, be they culturally defined or otherwise.

Throughout the course of this research work the need to balance the different demands of family and personal life, clinical work on placement, the academic demands of the course and attendance at lectures, and the research project have been a constant theme. This balancing act has been made easier by a number of factors. I have become increasingly aware of my own preferred styles of working: I work best to deadlines which help with personal motivation, at times when I have found it difficult to engage productively in the work devoting time to other aspects of my life has been useful. I have needed at times to say 'no' to extra demands that are put to me, and to prioritise different demands on my time.

## Appendix 1

- Journal of Mental Health Instructions for Authors
- Letter of approval from Chair of Research Subcommittee



## *Journal of Mental Health*

### Instructions for Authors:

**\*\*\*Note to Authors:** please make sure your contact address information is clearly visible on the **outside** of all packages you are sending to Editors. \*\*\*

*Journal of Mental Health* is an international journal adhering to the highest standards of anonymous, double-blind peer-review. The journal welcomes original contributions with relevance to mental health research from all parts of the world. Papers are accepted on the understanding that their contents have not previously been published or submitted elsewhere for publication in print or electronic form.

Manuscripts should be sent to Executive Editor, Professor Til Wykes, Department of Psychology, Institute of Psychiatry, De Crespigny Park, London, SE5 8AF, United Kingdom. Electronic submission is also welcomed using the *Journal of Mental Health* e-mail address: [jmh@iop.kcl.ac.uk](mailto:jmh@iop.kcl.ac.uk). It is essential that authors pay attention to the guidelines to avoid unnecessary delays in the evaluation process.

To expedite assessment, three complete copies of each manuscript should be submitted along with an electronic version on disk. The names of authors should not be displayed on figures, tables or footnotes to facilitate blind reviewing.

**Manuscripts** should be typed on one side of paper, double-spaced (including references), with margins of at least 2.5cm (1 inch). Good quality printouts with a font size of 12 or 10 pt are required. The first page should show the full title of the paper, a short title not exceeding 45 characters (to be used as a running title at the head of each page), the full names and affiliations of authors and the address where the work was carried out. The corresponding author should be identified, giving full postal address, telephone, fax number and email address if available. To expedite blind reviewing, no other pages in the manuscript should identify the authors. All pages should be numbered.

**Abstracts** . The second page should also show the title, together with a structured abstract of no more than 200 words, using the following headings: Background, Aims, Method, Results, Conclusions, Declaration of interest. The declaration of interest should acknowledge all financial support and any financial relationship that may pose a conflict of interest. Acknowledgement of individuals should be confined to those who contributed to the article's intellectual or technical content.

**Keywords.** Authors should include up to five key words with their article, selected from the American Psychological Association (APA) list of index descriptors, unless otherwise agreed with the editor.

**Text** . Follow this order when typing manuscripts: Title, Authors, Affiliations, Abstract, Key Words, Main text, Appendix, References, Figures, Tables.

Footnotes should be avoided where possible. Manuscripts should not exceed 6,000 words unless previously agreed with the editor. Language should be in the style of the APA (see *Publication Manual of the American Psychological Association*, Fifth Edition, 2001).

**Style and References** . Manuscripts should be carefully prepared using the aforementioned *Publication Manual of the American Psychological Association* , and all references listed must be mentioned in the text. Within the text references should be indicated by the author's name and year of publication in parentheses, e.g. (Hodgson, 1992) or (Grey & Mathews 2000), or if there are more than two authors (Wykes *et al.* , 1997). Where several references are quoted consecutively, or within a single year, the order should be alphabetical within the text, e.g. (Craig, 1999; Mawson, 1992; Parry & Watts, 1989; Rachman, 1998). If more than one paper from the same author(s) a year are listed, the date should be followed by (a), (b), etc., e.g. (Marks, 1991a).

The reference list should begin on a separate page, in alphabetical order by author (showing the names of *all* authors), in the following standard forms, capitalisation and punctuation:

a) For journal articles (titles of journals should *not* be abbreviated):

Grey, S.J., Price, G. & Mathews, A. (2000). Reduction of anxiety during MR imaging: A controlled trial. *Magnetic Resonance Imaging*, 18 , 351–355.

b) For books:

Powell, T.J. & Enright, S.J. (1990) *Anxiety and Stress management* . London: Routledge

c) For chapters within multi-authored books:

Hodgson, R.J. & Rollnick, S. (1989) More fun less stress: How to survive in research. In G.Parry & F. Watts (Eds.), *A Handbook of Skills and Methods in Mental Health Research* (pp. 75–89). London:Lawrence Erlbaum.

**Illustrations** should *not* be inserted in the text. Three copies of each should be provided separately, numbered on the back with the figure number and the title of the article. All photographs, graphs and diagrams should be referred to as 'Figures' and should be numbered consecutively in the text in Arabic numerals (e.g. Figure 3). The appropriate position of each illustration should be indicated in the text. A list of captions for the figures should be submitted on a separate page and should make interpretation possible without reference to the text. Captions should include keys to symbols. It would help ensure greater accuracy in the reproduction of figures if the values used to generate them were supplied.



**Tables** should be typed on separate sheets and their approximate position in the text should be indicated. Units should appear in parentheses in the column heading but not in the body of the table. Words and numerals should be repeated on successive lines; 'ditto' or 'do' should *not* be used.

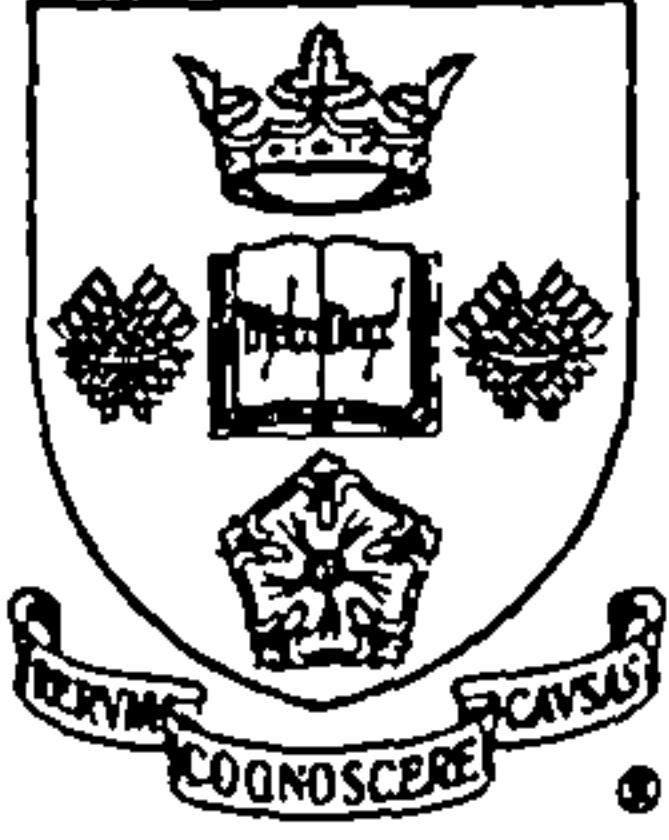
**Accepted papers** . If the article is accepted, authors are requested to submit their final and revised version of their manuscript on disk. The disk should contain the paper saved in Microsoft Word, rich text format (RTF), or as a text or ASCII (plain) text file. The disk should be clearly labelled with the names of the author(s), title, filenames and software used. Figures should be included on the disk, in Microsoft Excel. A good quality hard copy is also required.

**Proofs** are supplied for checking and making essential corrections, not for general revision or alteration. Proofs should be corrected and returned within three days of receipt.

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**THE UNIVERSITY OF SHEFFIELD**  
**Clinical Psychology Unit**  
**Department of Psychology**

Doctor of Clinical Psychology (DClin Psy) Programmes (Pre-registration and post-qualification)  
Clinical supervision training and NHS research training and consultancy

**Clinical Psychology Unit**  
**Department of Psychology**  
**University of Sheffield**  
**Western Bank**  
**Sheffield S10 2TP UK**  
Unit Director: Prof Graham Turpin  
Assistant Director : Prof Pauline Slade  
Prof Gillian Hardy

Telephone: 0114 2226570  
Fax: 0114 2226610  
Email: dclinpsy@sheffield.ac.uk

Clinical Practice Director: Ms Joyce Scaife  
Course Administrator: Carole Gillespie  
Prof Nigel Beail

12<sup>th</sup> July 2004

David Woods  
Third year trainee  
Clinical Psychology Unit  
University of Sheffield

Dear David

I am writing to indicate our approval of the journal(s) you have nominated for publishing work contained in your research thesis.

**Literature Review:** Journal of Mental Health

**Research Report:** Option A

Please remember to bind in this letter and copies of the relevant Instructions to Authors with your thesis.

Yours sincerely

Andrew Thompson  
Chair, Research Sub-Committee

## Appendix 2

- Ethics approval letter

**North Sheffield Ethics Office**  
1<sup>st</sup> Floor Vickers Corridor

Direct Line: 0114 271 4894 or 271 4011  
Fax: 0114 256 2469

**Email: Sue.Rose@sth.nhs.uk**

**Northern General Hospital**  
Herries Road  
Sheffield  
S5 7AU

CMHN/AD/06/10/03

**Turpin/NS2003 10 1784**

**Please quote this number on all correspondence**

21<sup>st</sup> November 2003

Mr D Woods  
Trainee Clinical Psychologist  
Clinical Psychology Department  
University of Sheffield  
Western Bank  
SHEFFIELD  
S10 2TP

Dear Mr Woods

**An exploratory study of associations between psychological ill-health, social exclusion, trauma, demographic factors and the use of khat among Somali men and women.**  
**NS2003 10 1784**

The Chair/Honorary Secretary of the North Sheffield Research Ethics Committee has considered the modifications submitted in response to the Committee's earlier review of your application on 6<sup>th</sup> October 2003 as set out in our letter dated 9<sup>th</sup> October 2003. The documents considered were as follows:

- Questionnaire version 2.
- Information sheet version 2.
- Details of indemnity arrangements with Community Health Sheffield dated 27<sup>th</sup> February 2003.
- Details of indemnity arrangements with the University of Sheffield dated 12<sup>th</sup> November 2003.

The Chair/Honorary Secretary, acting under delegated authority, is satisfied that these accord with the decision of the Committee and has agreed that there is no objection on ethical grounds to the proposed study. I am, therefore, happy to give you the favourable opinion of the committee on the understanding that you will follow the conditions set out below.

#### Conditions

- You do not recruit any research subjects within a research site unless favourable opinion has been obtained from the relevant REC.



- You do not undertake this research in an NHS organisation until the relevant NHS management approval has been gained as set out in the *Framework for Research Governance in Health and Social Care*.
- You do not deviate from, or make changes to, the protocol without prior written approval of the REC, except where this is necessary to eliminate immediate hazards to research participants or when the change involves only logistical or administrative aspects of the research. In such cases the REC should be informed within seven days of the implementation of the change.
- You complete and return the standard progress report form to the REC one-year from the date on this letter and thereafter on an annual basis. This form should also be used to notify the REC when your research is completed and in this case should be sent to this REC within three months of completion.
- If you decided to terminate this research prematurely you send a report to this REC within 15 days, indicating the reason for the early termination.
- You advise the REC of any unusual or unexpected results that raise questions about the safety of the research.

A full record of the review undertaken by the REC is contained in the attached REC Response Form. The project must be started within three years of the date on which REC approval is given.

Yours sincerely



Dr C M H Newman  
HONORARY SECRETARY - NORTH SHEFFIELD RESEARCH ETHICS COMMITTEE  
Senior Lecturer in Cardiology/Honorary Consultant Physician

Cc Professor G Turpin, Dr J Nicholson

Encs

## Appendix 3

- Questionnaire (English language version)
- Questionnaire (Somali language version)

# SAHMINTA KU SAABSAN FIICNAANSHAHA, KELI AHAANSHAHA, JAHA-WAREERKA IYO ISTICMAALIDDA QAADKA EE RAGGA IYO DUMARKA SOOMAALIYEED

## *Yaa samaynaayo baaristaan?*

Baaristaan waxaa samaynaayo Dave Woods. Oo ah Tabobaraha Kiliinikada Caafimaadka maskaxda ee Jaamacadda Sheffield. Baarista waxay gacan buuxdo ka haysataa ururka samafalka soomaaliyeed ee Somali Mental Health (Caafimaadka Maskaxda Soomaaliyeed).

## *Maxay baarista ku saabsan tahay?*

Daraasadda waxay eegaydaa haddii uu jiro saxariir nafsii ah, ka go'id bulsho, gacansiin bulsho iyo jaha-wareer oo mid kasto kan kale la lee-yahay xiriir isticmaalidda qaadka.

## *Yaa ka qaybqaadan karo?*

Dhammaan raga iyo dumarka 18 jirka ah ama ka wayn way soo buuxin karaan su'aalo-waydiimaha. Si kastaba ha ahaatee, ka qaybqaadashada waa mid ah iskaa wax u qabso.

## *'Yaa arkaayo jawaabahayga?'*

Haddii aad go'aansatid inaad ka qaybqaadatid ma lagu waydiin doono magacaada, iyo wax warar ahna ma lagu oggolaanaayo in lagu waydiiyo ama la qoro si lagu aqoonsado. Dhammaan shaqaalaha ku hawlan baarista waxay si buuxdo u ogyahiin baahida loo qabo kalsoonida ka qaybgalayaasha waxayna saxiixi doonaan heshiiska ah inaysan u sheegin dad kale faahfaahinta qof kasto lee-yahay ee ku saabsan ka qaybgalayaasha.

## *Sidee ayaan u soo buuxinayaa?*

Waxaan doonaynaa inaan ogaano aragtiyadaada shakhsiga ah ee ku saabsan arrimaha lagu soo qaaday su'aalo-waydiimaha. Fadlan u akhri su'aal kasto si taxadir leh, laakin u dhiibo jawaabtaada si degdeg ah adiga oo tik siinaayo sanduuqa  sida ugu fiican u taabanaayo aragtiyadaada. Shaqaalaha ka socdo Somali Mental Health waxay kaa cawini karaan buuxinta su'aalo-waydiimaha haddii loo baahdo.

## *Maxay sahminta soo koobaydaa?*

Su'aalo-waydiimaha wuxuu u qaybsan yahay shan qaybood:

- Qaybta A: Qaybtaan waxay ku waydiinaydaa faahfaahinta asalka ah ee kugu saabsan.
- Qaybta B: Qaybtaan waxay khusaydaa fiicnaanshahaada.
- Qaybta C: Qaybtaan waxay khusaydaa jaha-wareerka kugu dhacey waqti hore iyo sida uu ku waxyeeleeyay.
- Qaybta D: Qaybtaan waxay khusaydaa gacansiinta aad ka heshid qooyaska iyo saaxibada iyo xitaa dareemada aad ka qabtid halka aad ku nooshahay iyo xaaladdaada nololeed.
- Qaybta E: Qaybta waxay khusaydaa aragtiyadaada ku saabsan qaadka, iyo inaad isticmaashid iyo inkale ama maadooyin kale.

## *Sidee uga soo jawaabayaa?*

Caddayn kasto ee lagu soo waydiiyay inaad tik siidid  jawaabta kugu habboon sida aad u dareensan tahay. Fadlan uga soo jawaab dhammaan su'aalaha si furfumaansho leh iyo saraaxad.

**Fadlan xasuuso inay ka qaybgalkaada yahay iskaa wax u qabso.**  
Fadlan ku akhri su'aal kasto si taxadir leh ka hor jawaabidda kana jawaab su'aal kasto.

**Waad mahadsan tahay**



## QAYBTA A: FAAHFAAHINTA ASALKA AH

**Waa muhiim inaan ogaano qaar ka mid ah faahfaahinadaada asaleed. Dhammaan waxay gabi ahaan noqon doonaan sir.**

1. Da'da: \_\_\_\_\_ sanadood

2. Ma tahay: Lab  Dheddig

3. Xaalad ku nolaanshaha

Keli noolaanshaha	<input type="checkbox"/>
Qooyis la noolaanshaha	<input type="checkbox"/>
Saaxibo la noolaanshaha	<input type="checkbox"/>

4. Xaaladda guurka

Guursaday	<input type="checkbox"/>
Doob	<input type="checkbox"/>
Garooob /aan isla noolayn/carmalo ah	<input type="checkbox"/>

5. Dadka kugu xiran:

a) Ma lee-dahay caruur? Haa  Maya

b) Tirada caruurta iyo/ama dadka kale ee kugu xiran: \_\_\_\_\_

6. Miyaad ku dhalatay Biritan?

Haa	<input type="checkbox"/>	<i>Fadlan tag su'aasha 10</i>
Maya	<input type="checkbox"/>	<i>Fadlan tag su'aasha 7</i>

7. Sanadkee ayaad soo gashay Biritan? \_\_\_\_\_

8. Sababta aad u timid Biritan?

Qaxooti doon	<input type="checkbox"/>
Waxbarasho	<input type="checkbox"/>
Qooyiska inaan la joogo	<input type="checkbox"/>

9. Miyaad haatan la noolayn xaaskaada/ninkaada ama caruurtaada Sababta oo ah inaad soo gashay Ingiriiska? Haa  Maya

10. Xaaladda shaqo

Shaqeeyo	<input type="checkbox"/>	<i>Tag su'aasha 13</i>
Arday	<input type="checkbox"/>	<i>Tag su'aasha 15</i>
Shaqo-laawe	<input type="checkbox"/>	<i>Tag su'aasha 11</i>

11. Haddii aadan shaqayn goormee kuugu dambaysay shaqo lacag leh \_\_\_\_\_

12. Haddii aadan shaqayn maxay tahay sababta ugu wayn oo aad u malaynaydid inaad heli karin shaqo

Dhibaatooyinka luqadda	<input type="checkbox"/>
Kala duwanaanshaha dhaqanka	<input type="checkbox"/>
Takhasus la'aan igu habboon	<input type="checkbox"/>
Aagga oo shaqo lahayn	<input type="checkbox"/>
Sabab kale (Fadlan caddeey)	_____

13. Shaqada haatan/midka ugu dhow \_\_\_\_\_

14. Shaqada ka horayday intaadan imaan  
Ingiriiska \_\_\_\_\_

15. Heerka ugu sareeyo waxbarashada Ma lehi takhasus caadi ah   
GCSE ama u dhigmo   
Heerka-A ama u dhigmo   
Shahaaddo sare ama u dhigmo   
Tabobar shaqo ama farsamo

## QAYBTA B: TAARIIKHDA JAHAWAREERKA IYO ASTAAMO-GARASHADA

Waxaan jecel nahay inaan kaa waydiino taariikhda astaamo-garashadaada hore iyo tan haatan.

16. Fadlan tilmaan inuu mar ku soo mareen iyo inkale dhacdooyinka soo socdaan.

- |   |                              |                               |
|---|------------------------------|-------------------------------|
| a. Dagaal ciidan ama kilin dagaal.  | Haa <input type="checkbox"/> | Maya <input type="checkbox"/> |
| b. Ka soo baxsad khasab ah xaalado khatar ah  | Haa <input type="checkbox"/> | Maya <input type="checkbox"/> |
| c. Hoy la'aan, cunto ama biyo la'aan  | Haa <input type="checkbox"/> | Maya <input type="checkbox"/> |
| d. La wareegid ama burburin hantida shakhsiga ah.   | Haa <input type="checkbox"/> | Maya <input type="checkbox"/> |
| e. Garaacis madaxa ah ama jirka.  | Haa <input type="checkbox"/> | Maya <input type="checkbox"/> |
| f. Jir-dil.   | Haa <input type="checkbox"/> | Maya <input type="checkbox"/> |
| g. Xabisid.   | Haa <input type="checkbox"/> | Maya <input type="checkbox"/> |
| h. Khasbid in dad kale la waxyeeleeyo.  | Haa <input type="checkbox"/> | Maya <input type="checkbox"/> |
| i. Waayitaan, dhimasho ama dhaawac loo gaystay xigtadaada.  | Haa <input type="checkbox"/> | Maya <input type="checkbox"/> |
| j. Marqaati-goob jog ka noqosho faraxumayn loo gaystay dad kale.  | Haa <input type="checkbox"/> | Maya <input type="checkbox"/> |
| k. Dhaawac maskaxeed.   | Haa <input type="checkbox"/> | Maya <input type="checkbox"/> |
| l. Xaalad kale oo aad cabsi u lahayd ama aad u dareentay inay naftaada khatar gelinaysay.<br>Fadlan caddey: |                              |                               |

Haddii uu ku soo maray mid ka mid ah dhacdooyinka kore fadlan sii wad. Haddii aysan sidaasi ahayn u gudub su'aasha 18.

	<i>Marna dhammaann</i>	<i>Xoogaa yar</i>	<i>Ad u yar</i>	<i>Xagjira</i>
<b>17. Kuwa soo socdaan waa astaamo-garashada ay dadka ma mar qabaan ka dib markii ay naftooda soo mareen dhacdooyin waxyeelo ama naxdin leh. Fadlan u akhri mid kasto si taxadir leh ee go'aanso sida uu kuu taabteen astaamo-garashada <u>toddobaadkii la soo dhaafay.</u></b>				
a. Soo noqnoqashada fikirka ama soo xasuusashada dhacdooyinkii aadka u xumaa ama naxadinta lahaa.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Dareemida sida inay kugu dhacayaan.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Soo noqnoqashada riyoooyinka cabsida leh.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Gooni jog.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Dareen la'aan.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Miyaad dareemaysaa sakati baqdineed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Maahis, (maqane jooga).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Hurdo xumo.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Feejignaan.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Maroora dilaac.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. Adoon jeclaysan xasuusashada dhibaatooyinkii ku soo maray.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l. Xasuus daro ay keentay dhibaatooyinkii ku soo maray.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m. Xiiso la'aan falmaalmeedkaaga.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n. Ma dareentaa aayo la'aan.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o. Adoo is diidsiinaaya inaad xasuusato dhibaatooyinkii ku soo maray.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
p. Muujin dareen degdega ama faljiraad marka lagu xasuusiyo waxyaabihii ama dhacdooyinkii jaah wareerka ahaa ee ku soo maray.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



## QAYBTA C: FIICNAANSHAHAADA

Waxaa suurto gal ah in buuxinta su'aalaha qaarkood u keenaan taxadir dhibaatooyinka aad maraysid. Haddii aad ka welwelsan tahay inay kuwaan aad u xun yahiin, waxaan kugu la talinaynaa inaad la xiriirtid TG, ama Somali Mental Health (fiiri bogga ugu dambeeyo).

18. Waxaa hoos ku liis garaysan astaamo-garashada ama dhibaatooyinka ay mar mar dadka qabaan. Fadlan u akhri mid kasto si taxadir leh ee tilmaan sida astaamo-garashada ku taabteen ama ku jahawareeriyeen toddobaadkii la soo dhaafay, ay ku jirto maanta.

	<i>Marna dhamm aann</i>	<i>Xoogaa yar</i>	<i>Aad u yar</i>	<i>Xagjira</i>
a. Cabsi sabab la'aaneed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Dareen cabsi leh.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Dawakhaad, wareer, tamar daro.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Kalkabood.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Wadno gariir.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Jarays.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Diiqad.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Madax xanuun.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Dareen argagax leh.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Dareen deganaansho la'aaneed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. Taqwo daro.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l. Is hiifid.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m. Iska ooyid.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n. Hamada oo kaa lunta.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o. Oon xumo.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
p. Hurdo la'aan gami waa.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
q. Ka quusatay nolosha.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
r. Qulub.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
s. Cidla-cidla oo aad dareento	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
t. Adoo ku fekeri nafta ood iska qaado.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
u. Dareemid qafladeed, ama cidhiidhi.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
v. Werwar badan.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
w. Dareen xiiso la'aaneed .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
x. Dareen caalwaa.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
y. Dareen qiimo la'aaneed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## QAYBTA D: QOOYSKAADA, SAAXIBADAADA IYO JAARKAADA

Waxaan haatan jecel nahay inaan kaa waydiino qooyaskaada iyo saaxibadaada. Qooyis waxaan ulajeednaa kuwa kula nool sidaasi oo kalena ku nool meel kale.

Halkaa waxaa ku yaal faallooyin ku saabsan qooyiskooda oo ay sameeyeen dad. Fadlan sheeg inta ay kuu tahay run caadayn kasto.

18. Waxaa jiraan dad ku jiro qooyiskayga iyo saaxibadeey oo aan aqaano...

	<i>Ma aha run</i>	<i>Qayb ayuu ka yahay run</i>	<i>Xaqiiq ahaan run</i>
a. oo sameeyaan waxyaabo I farxad gelinaayo.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. oo ii muujinaayo inay jeceel yihiin.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Oo lagu kalsoonaan karo iyada oo loo fiirin waxa dhacayo.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. oo cegaayo in lay xanaaneeyo haddii aan u baahdo.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. oo igu oggol sidaan ahay.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. oo iga dhigaayo inaan ka ahay qayb muhiim ah noloshooda.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. oo I siinayaan gacan iyo dhiirigelin.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Su'aalaha soo socdaan waxay wax kaa waydiinayaan aagga aad ku nooshahay iyo xaaladahaada nololeed.

19. Fadlan sheeg inta ay kuu tahay run caadayn kasto.

	<i>Ma aha run</i>	<i>Qayb ayuu ka yahay run</i>	<i>Xaqiiq ahaan run</i>
a. Waan ka baqaa dembiga.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Waxaa laygu xumeeyay gurigayga banaankiisa.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Waxaa la ii dhigay hoos ama lay xumeeyay sababta oo ah asalkayga ama jinsiyaddayda.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Waxaa la ii dhigay hoos ama lay xumeeyay sababta oo ah diinta Aan aaminsa nahay	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Si fiican oo igu filaan ayaan u awoodi karaa cunto iyo dhar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Waxaan awoodi karaa inaan ku noolaado raaxo (tusaale.tayo oo guriyeen fiican oo ku filnaansho leh, waxaana awoodi karaa inaan iska bixiyo lacagta kululeesada).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Aragtiyadayda waxaa dhegta u dhigaan siyaasiyiinta.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Baahidayda waxa gacan igu siiyaan kooxaha jaaliyadda ama Ururo kale.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## QAYBTA E. QAADKA

**25 Su'aalaha soo socdaan waxay wax kaa waydiinayaan aragtiyadaada ku saabsan qaadka.**

- |   |                              |                               |
|---|------------------------------|-------------------------------|
| a. Ma u malaynaydaa in isticmaalidda qaadka ku yahay dhib jaalliyaddaada? | Haa <input type="checkbox"/> | Maya <input type="checkbox"/> |
| b. Ma ku lee-dahay isticmaalidda qaadka waxyeelo xun qooyaskaada?         | Haa <input type="checkbox"/> | Maya <input type="checkbox"/> |
| c. Ma kula fiican yahay in qaadka la keeno Biritan?                       | Haa <input type="checkbox"/> | Maya <input type="checkbox"/> |

**Su'aalaha soo socdaan waxay ku waydiinayaan isticmaaliddaada qaadka iyo maaddooyin kale.**

- |                             |                               |                               |
|-----------------------------|-------------------------------|-------------------------------|
| 20. Ma isticmaashaa qaadka? | Haa <input type="checkbox"/>  | <i>Fadlan tag su'aasha 21</i> |
|                             | Maya <input type="checkbox"/> | <i>Fadlan tag su'aasha 25</i> |

- |  |                                      |  |
|--|--------------------------------------|--|
| 21. Imisa maalimood ayaa qiyaastii toddobaadka isticmaasha qaadka? | 1 maalin <input type="checkbox"/>    |  |
|  | 2 maalimood <input type="checkbox"/> |  |
|  | 3 maalimood <input type="checkbox"/> |  |
|  | 4 maalimood <input type="checkbox"/> |  |
|  | 5 maalimood <input type="checkbox"/> |  |
|  | 6 maalimood <input type="checkbox"/> |  |
|  | 7 maalimood <input type="checkbox"/> |  |

22. Imisa marduuf ayaad ku qayishaa fadhi kasto. \_\_\_\_\_ marduufyo

23. Qiyaastii waqtigee bilaabdaa qayilaadda? \_\_\_\_\_

24. Qiyaastii waqtigee dhammaydaa qayilaadda? \_\_\_\_\_

**25 Su'aalaha soo socdaan waxay wax kaa waydiinayaan isticmaaliddada muqaadaraadka kale**

- |                                       |                              |                               |
|---------------------------------------|------------------------------|-------------------------------|
| a. Ma cabtaa qamriga?                 | Haa <input type="checkbox"/> | Maya <input type="checkbox"/> |
| b. Ma cabtaa tubaakada?               | Haa <input type="checkbox"/> | Maya <input type="checkbox"/> |
| c. Ma cabtaa xashiiska/marajuana?     | Haa <input type="checkbox"/> | Maya <input type="checkbox"/> |
| c. Ma isticmaashaa amphetamine/speed? | Haa <input type="checkbox"/> | Maya <input type="checkbox"/> |
| d. Ma isticmaashaa cocaine?           | Haa <input type="checkbox"/> | Maya <input type="checkbox"/> |
| e. Ma isticmaashaa crack cocaine?     | Haa <input type="checkbox"/> | Maya <input type="checkbox"/> |
| f. Ma isticmaashaa heroin?            | Haa <input type="checkbox"/> | Maya <input type="checkbox"/> |

**Aad ayaad ugu mahadsan tahay dhammaystirka su'aalowaydiimahaan. Fadlan ku soo rid su'aalowaydiimaha baqshadda oo horay loo bixiyay, xir ee dib ugu soo dir baaraha 14 maalimood gudahood.**

**Haddii aad rabtid in aad sameeyso faallooyin dheeri ah, fadlan waad u madax-banaan tahay inaad ku soo qortid halka banana ee hoose ( ama warqado saa'id ah ).**



**Haddii soo buuxinta su'aalwaydiimahaan uu keeno welwel ku saabsan caafimaadkaada maskaxeed ama isticmaalidda maadooyin fadlan la xiriir Takhtarkaada Guud ama ururada soo socdaan:**

**Somali Mental Health. tel. (0114) 2758556  
Black Drugs Service. tel. (0114) 2493700**

**Haddii aad ka qabtid wax su'aal ah ee ku saabsan daraasaddaan, ama welwel ama cabasho fadlan la soo xiriir:**

**David Woods (baare) lambarka (0114) 2226632  
ama Dr Jo Nicholson (korjooge) lambarka 07980 733148.**

**Aad ayaad ugu mahadsan tahay wada shaqaynta.**

## Appendix 4

Rotated component matrices for factor analysis of social exclusion scale.

The rotated (varimax) component matrix for 4 factor solution is presented below. This shows that the items *'My views are listened to by politicians'* and *'My needs are supported by community groups or other organisations'* loaded onto different components.

Rotated Component Matrix

	Component			
	1	2	3	4
I am frightened of crime	.796	.201	-5.203E-02	-4.624E-02
I am harassed outside of my home	.925	-7.916E-02	-2.486E-02	-8.311E-02
I am put down or harassed because of my race or nationality	.940	-3.969E-02	7.298E-03	-7.216E-02
I am put down or harassed because of my religious beliefs	.881	-.134	2.001E-02	-.102
I can(not) afford good enough food and clothes	-3.486E-02	.953	5.688E-02	-2.844E-02
I can(not) afford to live comfortably (eg good enough quality housing, and can afford heating bills)	-3.808E-03	.969	-1.419E-02	-4.089E-02
My views are listened to by politicians	-.156	-6.060E-02	.112	.979
My needs are supported by community groups or other organisations	-1.952E-02	3.635E-02	.992	.108

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

The rotated (varimax) component matrix for the final 2 factor solution is presented below. This shows high loadings on the first component for the 4 items covering social and cultural exclusion: *'I am frightened of crime'*, *'I am harassed outside of my home'*, *'I am put down or harassed because of my race or nationality'* and *'I am put down or harassed because of my religious beliefs'*. The 2 items covering economic exclusion, *'I can afford good enough food and clothes'* and *'I can afford to live comfortably (eg good enough quality housing, and can afford heating bills)'*, loaded highly on the second

component. These two items were reverse coded so that high scores indicated high levels of perceived exclusion. The items *'My views are listened to by politicians'* and *'My needs are supported by community groups or other organisations'* did not load highly on either factor.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
I am frightened of crime	.794	.176
I am harassed outside of my home	.923	-.101
I am put down or harassed because of my race or nationality	.934	-6.27E-02
I am put down or harassed because of my religious beliefs	.880	-.150
I can(not) afford good enough food and clothes	-1.90E-02	.953
I can(not) afford to live comfortably (eg good enough quality housing, and can afford heating bills)	1.763E-02	.966
My views are listened to by politicians	-.350	-.160
My needs are supported by community groups or other organisations	-9.03E-02	5.830E-02

Extraction Method: Principal Component Analysis.  
 Rotation Method: Varimax with Kaiser Normalization.  
 a. Rotation converged in 3 iterations.