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Assessing Stress, Coping and Quality of Life among Refugees and Asylum Seekers in Luxembourg

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Dedication

I dedicate this work to thousands of refugees who die from drowning in the Mediterranean Sea every year.

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Foreword

Health has emerged as one of the fundamental needs of all humans. For this reason, living in good health is a fundamental right. Mental health as one of the dimensions of health has gain more attention today than in the past. In light of this, the mental health of vulnerable population calls for more concern (World health organization, 2005). Given the global war crisis, the number of refugees has increased. Refugees are indeed a population at risk given their experience. In order to contain the problem, the World Health Organization (WHO) and the United Nations Organization (UNO) have set standards that can go a long way in bursting the health of refugees and asylum seekers.

Constitution of the world health organization

1. Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

2. The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, and political belief, economic or social condition.

3. The extension to all peoples of the benefits of medical, psychological and related knowledge is essential to the fullest attainment of health.

United Nations convention relating to the status of refugee

Article 23 - Public relief

The contracting states shall accord to refugees lawfully staying in their territory the same treatment with respect to public relief and assistance as is accorded to their nationals.

Article 21 – Housing

As regards housing, the contracting states, in so far as the matter is regulated by laws or regulations or is subject to the control of public authorities, shall accord to refugees lawfully staying in their territory treatment as favorable as possible and, in any event, not less favorable than that accorded to aliens generally in the same circumstances.

Article 15 - Right of association

As regards non-political and non-profit-making associations and trade unions the contracting States shall accord to refugees lawfully staying in their territory the most favorable treatment accorded to nationals of a foreign country, in the same circumstances.

Article 3 - Non-discrimination

The contracting states shall apply the provisions of this convention to refugees without discrimination as to race, religion or country of origin.

Article 4 - Religion

The contracting states shall accord to refugees within their territories treatment at least as favorable as that accorded to their nationals with respect to freedom to practice their religion and freedom as regards the religious education of their children.

Article 1 of the Geneva convention (1951) defines a refugee as "*Any person who owing to a well founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his/her nationality and is unable, or owing to such fear, is unwilling to avail himself/herself of the protection of that country*".

Through out this project, the legal term of the word refugee as defined by the UNO convention (1951) will be used. The term "asylum seeker" shall be used interchangeably with the term "refugee" since fleeing ones own country under the reason set forth by UNO convention of 1951 already qualified an individual as a refugee. Although asylum

seekers physically file their cases in the host country, some refugees cases maybe first heard by the United Nations High Commissioner for Refugees (UNHCR) before deciding where to resettled them (Weaver & Burns, 2001). Additionally studies conducted on refuges and asylum seekers indicated that asylum seekers were at higher risk of various stress than refugees although the difference in this findings were not significant (Gerritsen et al., 2006). In 2013 ending, a total of 51.2 Million people were forcefully displaced around the world due to persecution, conflicts and human rights violations (UNHCR, 2013). Among these figures, 16.7 millions were refugees while 1.2 million were asylum seekers. Still on the same trend, from the total figure (51.2 million) displace, 33.3 million were displace internally. In 2013, 612,700 asylum seekers were registered in 44 industrialized nations, while from these figures Europe registered 484,600 asylum seekers (UNHCR, 2013). Still in the same year, a total number of 1,071 asylum seekers were registered in Luxembourg (Ministry of external affairs, 2013). In accordance with reaffirmation from the UNHCR in 2013, the primary concern of all state holders should be to promot the right and well-being of refugees. Therefore factors contributing to their well-being such as mental health should be considered with urgency. The mental health situation of refugees should be considered as a priority for his or her well-being (Dana, 2000a). In light of this, factors enhancing their coping with stress, multicultural attitude and quality of life remains unavoidable.

Chapter 1

Literature Review and Method

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Refugees and Asylum Seekers Background

Who is a refugee?

Meeting in Geneva 1951, the United Nations Organization (UNO) drew a legal charter that define and govern the rights of refugees through out the whole world. This legal document also spare out the obligations of members state that sign and rectify the charter. Referring to article 1 of this convention, a refugee is any person who is "outside his or her home country, has a well founded fear of persecution due to his or her race, religion, nationality, membership of a particular social group or political opinion, and is unable or unwilling to gain protection from that country, or to return there for fear of persecution" (UNHCR, 2007, p. 7). Given that this legal definition covers only individuals who found themselves outside their home country, there also exist individuals who found themselves displaced in their home countries. Here we talk of Internally Displaced Persons (IDPs). Equally, there exist individuals who return to their home countries. Persons without a country who are not considered as nationals by any states. These three categories of persons are not protected by the legal term of refugee as detected by article 1 of the United Nations convention on refugees. Psychologically speaking, there exist no specific term that define refugees (Papadopoulos, 2002). However Psychology classified refugees under vulnerable population with traumatic experience (Papadopoulos, 2001). These traumatic experiences start from home country, through flight and haunt them to their host countries. By the end of 2013, the United Nations High Commissioner for Refugees (UNHCR) estimated that 51.2 millions people were forcefully displaced worldwide mainly due to conflicts, persecution and human right violation. From this figure, 16.7 millions were refugees, 33.3 Internally Displace Persons (IDPs) and 1.2 million asylum seekers (UNHCR, 2013, p. 1). Equally, countries that have produced highest numbers of refugees include Afghanistan, Syria, Somalia, South Sudan, Democratic republic of Congo, Iraq, Myanmar, Eritrea, Vietnam and Columbia (UNHCR, 2013). While the population of refugees keeps on increasing, there is growing concern over the number of IDPs. This is mainly due to ethnic and religious conflicts like the Boko Haram case in Nigeria (Nuhu & Daviot, 2014).

Who is an asylum seeker?

Literally speaking, an asylum seeker is an individual who file for a refugee status outside his or her home countries. Referring to the United Nations definitions, there maybe no doubt that once individual leaves their home country due to any of the reasons set fort, there are already refugees. Which therefore means that psychology will still classified asylum seekers under the vulnerable population with traumatic experience. In an attempt to distinguish refugees from asylum seekers, there was evidence in the level of stress related disorders with asylum seekers scoring higher than individuals who already obtained a refugee status (Gerritsen et al., 2006). However, this difference was not significant. Psychologically speaking, the term refugee and asylum seeker maybe used interchangeably although individuals with refugee status are stress relief than asylum seekers. Referring to the asylum seekers trend, nearly 2.1 million individuals did file to obtain a refugee status by the end of 2013. Highest cases were registered in the United State of America (USA), Turkey, Germany, Kenya and South Africa (UNHCR, 2013).

Refugees as migrant

Referring to the United Nations Educational, Scientific and Cultural Organization (UNESCO), any individual who found him or herself in a country that is not of his or her birth and have obtained some social bonds with that country is a migrant. Furthermore, this term should cover individuals who leave from one country to another with a free will of doing so. In many settings, migrant usually refer to individuals who goes to another country for purpose of paid activities such as work (United Nations Organization, 1995). Indeed refugees are not qualified to be called migrant given their nature and reason of flight. Unlike migrants who travel base on choice, refugees have no alternative than to embark on the journey characterized by various traumatic events. Most of these refugees travel with risky means such as sea and land with no security of survival. In the past decade, thousands of refugees ended up drowning in oceans and some disappearing in deserts (UNHCR, 2013). Through out their journey, they seek out for safety and protection from host countries. In many cases they end up in countries that cannot afford

to take care of them. In light of this, refugees may spend their greater part of live in precarious conditions due to poverty and soci-economic vulnerability. Most of them flee in hope of resettlement. An aspect which each state is not obliged to do so. In light of this, many refugees never got settled in the host country. For example less that 2 person of the 51 million refugees were resettled in their host countries (UNHCR, 2013). This is always a tedious process as only quota refugees are granted the right of resettlement. The United Nations Organization in collaboration with host countries always conducts a proper assessment to ensure that individuals are qualified for the quota refugee scheme. Given all these, there is therefore a need to distinguish refugees from migrants (Feller, 2005). With this distinction, we will be able to allocate available resources to the right quarters. This is true especially for psycho-social resources that are highly needed by refugees than migrants. Table 1 below shows the characteristics differences between refugees and migrants.

Table 1

Summary of differences between refugees and migrants

Characteristics	Refugees	Migrants
Preparation prior to departure	Unprepared given the urgency need to flee. Emotionally disturb as no time to bid farewell to family members	Very prepared and have enough time to party with family and friends before leaving
Relationship with the host country before leaving	Little or no choice about the host country. Depend fully on the host country assistance	Chose which country to go to or settled in. Leave with financial resources and personal belongings
Mental health situation upon arrival in the host country	Full of traumatic experience and loss. Lack of proper knowledge about the host country	Have a good level of the state of mind. Good knowledge on the socio-economic background of the country
Personal documentation	Embarked with no or insufficient personal documents such as ID card, Passport and Birth certificate	Always travel to their host countries with personal documents
Travel permit (Visa)	Travel in most case without a visa to enter the host country	Travel with a visa
Perception by the host country	Always victims of negative stereotypes and threads. Seen as a load to the welfare of the host country	Little or no negative stereotype as they mostly share a common culture and economic status
Family Members	Family members left behind or dead.	Able to bring family members or travel with them
Relation with home country	Cannot return to home country	Free to return to home country at any time

Adapted from the IDPs documents (UNHCR, 2013).

Refugees and Asylum Seekers Situation in Luxembourg

Refugees and asylum seekers in numbers

Luxembourg as one of the European Union (EU) country that participates in the Common European Asylum System (CEAS). In light of this, member's states are obliged to protect refugees and share information with other members. Given the war in Syria, Afghanistan and Iraq, Europe has witness a steady increase in number of asylum cases. In 2013, Germany registered the highest number of asylum application followed by France and Sweden (UNHCR, 2013). Regarding Luxembourg, the number of asylum cases has increased as compared to the previous years. However, in 2012 there were more cases (2057) than in 2013 (1071). At the end of October 2014, 894 cases were already registered (Ministry of external affairs, 2014). See Annex 1 for the evolution of asylum seekers in Luxembourg.

Classification of refugees

Given that Luxembourg is one of the 147 state that adheres to United Nations convention of 1951, Luxembourg is oblige to allow individuals in her territory until their asylum application are assessed. This assessment always leads to either refugee status recognition or denial. For example in 2014, out of 1028 cases, only 99 asylum seekers were granted the refugee status (Ministry of external affairs, 201). Once the refugee status has been granted, individuals now have full right as the Luxembourgish citizens in many domains. Equally, once refused individual are faces with another stressor mainly due to fear of repatriation and reapplication. When the refugee status is obtained by the individual in the host country, it is term **Conventional Refugee.** Additionally refugees that are referred by UNHCR for resettlement are called **Quota Refugees.** For instance during April of 2014 Luxembourg received and resettled 28 refugees from Syria under the quota scheme (Ministry of external affairs, 2014). These types of refugees are not subjected to asylum process once their case has been assessed by UNHCR, they are granted the refugee status

upon arrival to the host country. The other category of refugee includes **family reunification refugees.** In this category, closed family members such as spouse and children of refugee can join them once resettled in the host country. In certain cases, some asylum seekers can be granted the **status of tolerance** which implies that they can stay in the host country for a while but with very limited advantages. For example 30 asylum seekers were granted a similar status in Luxembourg during the year of 2014 (Ministry of external affairs, 2014).

Resident permit requirement

Asylum seekers are not required to have any residence permit. Once registered in Luxembourg, their registration card allows them to stay until their case is assessed (Ministry of external affairs, 2014). After obtaining a refugee status, individuals are entitled to a stay permit and after seven years of consecutive stay they can apply for citizenship after fulfilling language and citizenship courses conditions (Ministry of justice, 2008). Unlike immigrants whose length of stay is countered from the date they are legally registered in the councile, refugee's length of stay is countered from the first day they file in their asylum request (Ministry of justice, 2008).

Government support

The government support depends on the refugee's category. Preliminary, when individuals file for asylum seekers in Luxembourg, they are entitled to 25 Euros per month. Equally they have access to train and bus tickets for free with restaurant tickets at a reduced rate (Ministry of justice, 2008). After obtaining the refugees status (**Conventional refugees**), they are entitle to a good number of services available for the citizen and residents of Luxembourg. Exceptionally with **Quota refugees,** they are granted resettlement resources ranging from education to housing. In the case of **family refugee reunification**, refugees bringing their family members take full responsibilities of their newly arrived family members. After obtaining their stay permit, they are entitled to similar services attributed to citizens and residents of Luxembourg.

Other support

Apart from government support, there are families that opt to welcome refugees in their homes. For instance camping stein-ford that was own by an individual did help a lots of refugees especially the ones from Ex-Yugoslavia origins. Although the refugee department of caritas operates under the Luxembourgish government mandate, there are a lot of individuals effort especially in collecting funds destine to refugees and asylum seekers.

Mental Health of Refugees in Luxembourg

Scarcity of information

Despite several warnings that the mental status of refugees and asylum seekers in Luxembourg remain a problem, especially those coming from war stricken zones such as Afghanistan, Iraq and Syria (Red cross EU office, 2013), there is lack of enough information that can lead to a better understanding of the problem. There is lack of comprehensive studies that can provide continues data on the mental health situation of refugees and asylum seekers in Luxembourg. However, Schiltz, Ciccarello, Ricci-Boyer, and Schiltz (2013) included the refugee sample in their studies that assesses the ways their cope with trauma, anxiety, depression and guilt. In their study, there was evidence of the need of stakeholders to allocate more resources to the mental health care of refugees in Luxembourg. Hartmann-Hirsch (2002) in collaboration with *Association de Soutine aux Travailleurs Immigrés* (ASTI) reported that living in isolation, detention camps, and separation from families was indeed having an adverse effect on the mental health of refugees and asylum seekers in Luxembourg.

Identified needs

Refugees and asylum seekers are generally considered as a population at risk of infectious diseases together with various mental disorders given their precarious life.

However, there is lack of evidence that can establish if these groups of individuals are affected by mental disorders than other groups. Up to date, no studies in Luxembourg have comprehensively elaborated the mental health needs of refugees and asylum seekers. Our data base search indicated one qualitative study that focuses on Iraqi quota refugees in Luxembourg (Alina-Beth, 2009). In her study, she identified religion centers, belonging to community and family ties as important needs of Iraqi refugees. Never the less, the European National Red Cross Society in 2013 published a list of needs for refugees and asylum seekers in collaboration with the Red Cross of Luxembourg. First, medical and psychological needs are elaborated. These needs include, new life skills, creating network with the Luxembourg mental health system, occupational and socio-therapeutic help. These identification process runs under the "Eng Bréck no baussen" project. Equally, finding and reuniting refugees with their family has been identified as an important need. Here there is a need for administrative support in procedures that involves reunification of refugees family members. Furthermore, there is a resettlement need. Despite the Red Cross effort to accommodate refugees, the number of accommodation in their position is limited given the number of asylum seekers in Luxembourg. There is also a need for a long term accommodation. Furthermore, assisting unaccompanied minor refugees in housing, social and administrative support is an urgent need.

Mental healthcare system for refugees in Luxembourg

Red Cross and Caritas are the two main organizations in Luxembourg that acts as intermediary between refugees and various psychiatric departments. Under the "Eng Bréck no baussen" project, asylum seekers with mental disorders are guided. The project drives to assist refugees and asylum seekers with mental illness through culturally oriented social support together with adapted psychotherapy. Through this, refugees and asylum seekers are integrated to the Luxembourg mental health care system where cases requiring psychiatric intervention are referred to psychiatric centres. In light of this, this project offers help in individual, group, occupational rehabilitation and social integration level.

Limitations of the refugees and asylum seekers mental heath sector

Although some progress has been made in bursting the refugees and asylum seekers mental health care in Luxembourg, there is still a lots of work that needs to be done. For instance the European Union (EU) refugee fund together with Luxembourgish Government are co-funding the "Eng Bréck no baussen" project. Nevertheless there are not enough specialized professionals recruited at each refugee center. Resources are tilted more in recruiting educators and social workers more than mental health specialist. Equally there are no studies that have critically looked into the shortcomings of the systems or simply on the functionality of the system. For instance, the mental health needs of refugees and asylum seekers needs to be well differentiated from that of citizens and migrants (Guerin, Guerin, Diiriye, & Yates, 2004). The used of Diagnostic and Statistical Manual for Mental Disorders (5th ed.; *DMS-5*; American Psychiatric Association, 2013) needs to be culturally oriented as refugees and asylum seekers come from diverse cultural backgrounds. Therefore, the needs for specialist with well founded diverse cultural background in the mental health domains remain indispensible.

Various Post-Migration Stressors

Couples with pre-migration trauma, refugees and asylum seekers are face with various post-migration stressors once in the host country. These stressors in the host country are triggered by socio-economic factors ranging from poverty, unemployment, cultural differences to social integration difficulties. Tribe and Summerfield (2002) reported that these stressors in the host countries may out powered those encountered before departure from home country. Regardless of their cultural, educational and professional backgrounds, refugees and asylum seekers arrived the host country with a series of adaptation and integration problems (Hsu, Davies, & Hansen, 2004).

Acculturation

In the acculturation process, the refugees needs to adapt to the system while at the same time the host adapting to them. Base on Berry (1988, 2006) proposed models for acculturation process, refugee's acculturation attitude need to be adapted to fit the host acculturation attitude. When the acculturation is successful, it leads to integration. On the other hand, when it failed it results in marginalization. Also when the home and host cultures are preserved there is a sense of multiculturalism. When the refugees and host cultures does not lead to a positive interaction, it may leads to segregation. Once the host culture rejects the newcomer's culture, it may leads to exclusion (MacLachlan, 2006). Acculturation difficulties have been link to psychiatric morbidity (Cheung, 1995). As part of the minority in the host country, refugees and asylum seekers are overwhelm with the burden of acculturation. Lack of proper engagement in this process may results into societal withdrawal hence social isolation followed by various depressive moods.

Loss and grief

Refugees and asylum seekers are in most cases victims of human and material losses. In the process of involuntary migration, they have experience death, separation from family members and closed friends together with lost of materials. In many cases, their homes are destroyed or occupy by their traitors. Some times their children are forces to war zones. In light of this, they are deprived from the right of mourning their loves ones an aspect which can have a long lasting psychological effect. Indeed chronic symptoms of psychological grief and Post-traumatic Stress Disorders (PTSD) are link to religious believes and rituals (Boehnlein, 1987). Being labelled a refugee directly implies traumatized, government and social support dependent individuals. Indeed, they have lost their social status and maybe considered by the host as intruders. Many refugees and asylum seekers regard the status being allocated to them as a barrier to equal social status attainment which makes them to feel uneasy in the host country (Colic-Peisker & Walker, 2002).

Unemployment

Obtaining a job means reconstructing one's social status and gaining control over self. Asylum seekers with no right to take part in any paid job remain unemployed. On the other hand, individuals with refugees status may take years to integrate into the Luxembourg work market. This maybe as a result of language barrier and lack of required skills. Although there exist no published statistics on the employment rate of refugees, there is high tendency of discrimination in the employment market with language and skills as the excused factors. In many cases, they are employed in a job with a lower status as compared to their previous acquired competences. This leads to lost of previous status, disgrace and trauma. Here, identity reconstruction remains in crises. In a refugee's study of well-being, there was evidence of psychological well-being and life satisfaction associated with employment (Mcspaden, 1987). In light of this, being unemployed adds an additional burden to refugees and asylum seekers. There is lack of security and sense of belonging given the inability to participate in the socio-economic development of the host country.

Poverty

Lack of paid employment probably leads to poverty. For refugees, lack of financial income means dependent on government support mostly in form of unemployment benefits. In light of this, they do not have sufficient income to meet their required needs. They are force to live at the level of their benefits. This directly means lack of potentials to support families in their home countries. This involuntary economic benefit have a negative impacts on their lives as they lack the ability to save, get housing and food of their taste and inability to participate in the socio-economic development of their host country. This economic poverty creates a psychological distress among refugees and asylum seekers. Detzner (2004) reported that financial constraint was a major stressor among refugees and their family resettled in the United States of America (USA).

Administrative difficulties

Administrative process involved in the seeking of asylum remains a burden to asylum seekers. Coming from a background where the administrative system is relaxed to one

where it is stricter could be a challenge. From day one upon arrival in the host country, refugees are required to register as asylum seekers. Time spend in searching for the right quarters could be devastating as any encounter with the police prior to the registration could be costly and may lead to repatriation. Language barrier may delay the time of filing an application thus restoring fear of repatriation. Long awaiting time creates a certain degree of uncertainty and fear. All these creates psychological distress burden.

Change of family

Change of family directly implies engaging with a small community upon arrival in the host country. In many cases, refugees came from extended families backgrounds which are considered to be important. Arriving in cultures where families' ties are limited becomes a burden to them. This means that they may have the right to reunite only with closed family members. This situation becomes more critical for widows and widowers. Also in western cultures people are use to raising a small family, unlike in less developed countries parents deliver and raise a good number of children. This became a shock to refugees as they are regarded with negative stereotype when they arrived the host country and start giving birth to many children. Degni, Pontine, and Molsa (2006) showed that a change in family rule for muslim men when they arrived the west is devastating experience to them. Additionally, this change of roles may leads to internal conflicts and family mental well being instability (Tousignant, 1992). All these changes in family dynamics install instability and emotional distress in refugee family which could take years to be restored.

Cultural shock

Cultural shock which is similar to acculturation stress comes as results of adjustment to the host culture which is significantly different from one's own culture. When refugees arrived in the host country, they are bound to assimilate a process which may proof to be difficult. Force to face the reality that western media rarely project, refugees and asylum seekers day to day life activities become difficult. The cultural way of communication in the west maybe different from the one in the home country. In the western culture one needs to read or write to be able to survive economically. Changing the diet, type of

housing and paying of bills are all hassles associated with cultural shock. Climate changes, time zone change all install a sense of spatial disorientation and discomfort when it comes to dressing and circulation. Asking for direction, taking a bus or train are all aspect that may seem new to asylum seekers. This need of learning and incorporating to the host cultural ways of doing things may leads to accumulative stress especially in the case of incompatibility with the learning processes.

Community integration difficulties

Leaving from one community to another may stand out to be a difficult engagement. For example a community in Afghanistan does not necessary implies the same thing in Luxembourg. Trying to maintain one's community concept in the host country may proof to be devastating. This may leads to conflicts and internal power struggle within the refugee community itself (Phoumimdr, 2007). In less developed countries, the issue of a community leader is considered very important and an attempt to transfer it to the western country may clash with the west community concept. Similarly, all these community differences may lead to competition of materials. Indeed refugees arrived in communities where nearly everybody drives a car and own descent houses. They may consider themselves as poor people living in rich communities. This installs a low self-esteem and thus hinders community integration from the part of refugees and asylum seekers. At the same time, it may leads to isolation from the community. These community difficulties create a long lasting barrier for various stake holders to identify the needs of refugees and asylum seekers. At times, the allocated resources never reach the right quarters due to dispute and disengagement in families and communities (Phoumindr, 2007).

Common Stress and Related Mental Disorders among Refugees

There has always been conflicting findings on mental situation and psychiatric conditions of refugees and asylum seekers. When one scan through a good number of literature, it

will appear that many studies focuses on Post-Traumatic Stress Disorders (PTSD), depression and anxiety. There exist a lot of inconsistencies in many findings relating to the mental disorders of refugees (Graig, Jajau, & Warfa, 2006). Many of the studies have been descriptive in nature with poor methodology setup. The focus on these three related disorders have force mental health practitioners to think inside the box despite the evidence that the morbidity and their symptoms outweighs the diagnostic criteria of PTSD (Sternmark, Guzey, Elbert, & Holen, 2014). However frequent stress related mental disorders among refugees and asylum seekers will be described.

Acculturation stress

Acculturation can provoke identity crisis through change in mental state characterized by anxiety and confusion. When this occurs, we talk of acculturation stress. Acculturation stress refers to a "reduction in health status be it psychological, somatic or physical of persons experiencing acculturation process and for which there is evidence of correlation of health phenomena to acculturation process" (Berry, Kim, Minde, & Mok, 1987, p. 2). In light of this, stress then occur when a good number of psycho-social stressors create various demands for which they need to undergo adjustment (Jackson, 2006). Refugees and asylum seekers are one of the populations that are vulnerable to acculturation stress. Some studies have reported a high level of this stress in the refugee's sample (Friedlander & Roytburd 2008; Renner, Laireiter, & Maier, 2012). Although this stress forms part of the refugee's acculturation process, it is not given the attention it deserved for much resources are shifted towards PTSD, depression and anxiety.

Depression and general anxiety

It is more obvious that refugees and asylum seekers are most likely to live under depression and anxiety as a result of their previous losses. Depression remains an important type of mental disorder in refugees and asylum sample since it is cable of conducting them towards suicidal acts. Difficult living conditions add to their nightmares thus maintaining a depressive mood for a long period of time as they struggle to settle.

Difficult life situation such as racial discrimination and length of stay in the host country has been link to depression among refugees and asylum seekers (Beiser & Hou, 2001; Noh, Beiser, Kaspar, Hou, & Rummens, 1999). Furthermore a prevalence rate of depression ranging from 3 to 80% has been reported in the refugees and asylum seekers sample (Fazel, Wheeler, & Danesh, 2005). This explained why there exist a lot of literature dedicated to the treatment of depression and anxiety in refugees and asylum seekers population. For instance when Palic and Elklit (2011) carry out a systematic literature search on the treatment of stress related mental disorders in refugees and asylum seekers, more than 80% of the treatment included were focus on the treatment of depression and anxiety. In most cases, depression and anxiety are treated together with PTSD.

Post-Traumatic Stress Disorders (PTSD)

With the publication of *DMS-5*, PTSD have experience a shift from being an anxiety disorder to a clear traumatic events (American Psychiatric Association, 2013). In its new version, individuals must be directly expose to a traumatic event, witness a traumatic event and learn that a traumatic life threatening event has occur to a closed friend or family member. Symptoms such as intense fear and helplessness have disappeared from DMS-5. In an attempt to establish the PTSD prevalence rate among refugees and asylum seekers, Turner et al. (2003) show that with a sample of 842 Kosovo refugees in the UK, nearly 50% were victims of PTSD. Similarly, in a refugee community sample, PTSD is estimated at 70% (Gabel, Ruf, Schauer, Odenwald, & Neuner, 2006; Johnson & Thompson, 2008). This high rate is as a result of war and torture. In light of this, *DMS-5* description of PTSD suits the context of refugees and asylum seekers. This explain why a good number of treatment approaches such as Cognitive Behavioural Therapy (CBT), trauma focus therapy and narrative exposure therapy focuses on the treatment of PTSD. A recent systematic review of literature showed that more than 80% of treatment of refugees stress related mental disorders focus on PTSD (Halvosen, Stenmark, Neuner, & Nordhal, 2014; Morkved et al., 2014; Slobodin & de Jong, 2014). Although PTSD is common in refugees and asylum seekers, there are clear indications that more resources

have been attributed to it so much such that daily life stressors that are also psychologically damaging ignored (Hollifield et al., 2002).

Post-Traumatic Embitterment Disorders (PTED)

Although calls to include this form of mental disorder in the *DMS-5* were felt with deaf ears, it presence in the vulnerable population is documented. Given that PTSD is triggered by life threatening events, PTED is cause by non threatening life events that are transcribe as injustice by the population concern. When Belaise, Bernhaud, and Linden (2012) advocated for the inclusion of PTED in the *DMS-5*, they statistically differentiated it from other stress related disorders such as PTSD, depression and anxiety. This type of stress disorder is characterized by suicidal thoughts, feeling of helplessness, aggressive behaviors, public withdrawal and obtrusive thoughts (Hauer, Wessel, & Merckelbach, 2006). Although no study has evaluated PTED among refugees and asylum seekers, this group of individuals are often face with injustices ranging from racial to economic injustice. They are therefore potential victims of PTED. In this study, we will attempt to assess PTED in the refugee and asylum seekers sample.

Other psychosomatic disorders

Frequently, refugees and asylum seekers are face with unexplained mental disorders symptoms. These range from somatisation symptoms to physical pains such as fatigue and dysponea. These medical unexplained symptoms have been investigated by some authors. For instance, refugees from Iraq, Lebanon and Palestine reported their emotional problems as physical (Hakim-Larson, Kamoo, Nassar- McMillan, & Porcerelli, 2006). Most refugees focus on their somatic pains such as headache and stomach pain while neglecting their psychological pain (Feldmann, Bensing, & De Ruijter, 2007). This maybe directly related to the way psychological problems are perceived in non western cultures. For instance, the understanding of stress is ethno-cultural influence hence the perception in the west is different from that of non western nations (Jackson, 2006). In one study, it was reported that refugees from formal Yugoslavia resettled in Switzerland with psychological problems often seek help from medical physician (Perron &

Hudelson, 2006). In light of this, there is a need of culturally oriented mental care system in communities. With this, proper diagnosis can be made and effective treatment approaches followed.

Refugees and Asylum Seekers Coping with Stress

Once in stressful situation, refugees and asylum seekers needs to dealt with the situation. One way of doing so is coping with it. Coping include "the thoughts and behaviours used to manage the internal and external demands of situations that are appraised as stressful" (Folkman & Moskowitz, 2004, p. 745). This can either take emotional or problem focus approach. In many case the two strategies are used simultaneously. Although there exist no universally accepted model that described how refugees cope with stress, there is a general wisdom that problem focus coping maybe preferable and if possible reinforces rather than emotional focus coping. It has been earlier reported that when coping approach are not chosen wisely, they may lead to mental disorder (Endler & Parker, 2000; Lazarus & Folkman, 1984). There maybe a need for refugees and asylum seekers to spare their emotional coping strategies and focus on problem coping given they precarious situation. First they need to be in touch with people, second they need to engage in the community life, third they need to adapt hence escaping the stressful environment might not be psychologically beneficial. However there is evidence that the two types of coping strategies maybe deployed simultaneously (Caplan & Schooler, 2007; Harrop, Addis, Elliott, & Williams, 2006). Some studies show that young refugees use emotional and problem focus coping although the two coping strategies were link to PTSD (Elklit, Østergärd-Kjaer, Lasgaard, & Palic, 2012).

Emotional focus coping

This approach of coping includes social withdrawal and self-criticism. Here strategies that will obviously disengage the individual from the stressful situation are employed. Feelings are kept within oneself. Memories about the stressful situation are avoided and behaviours that might help in changing the stressful situation are not initiated (Tobin, 2001, p. 4).

Problem focus coping

Here individuals engage with the stressful situations and look for ways of solving them. Cognitive restructuring and social support are the commonly used strategies in this type of coping. Equally, emotions are not kept within oneself they are instead expressed. Here individuals enter negotiation with the ongoing stressful situation (Tobin, 2001, p. 4).

Coping Facilitators

Coping facilitators refers to those resources available for used in an attempt to enhance the coping process. These resources may be external or internal. Internal refers to those that act within in bursting the self-esteem such as self-efficacy and multicultural attitude. On the other hand, external resources are those that are provided by the environment such as social support.

Social support

Social support simply refers to the available external resources that can facilitate the use of coping strategies (Thoits, 1995). Throughout the literature of coping with stress among refugees and asylum seekers, social support have been used and recommended. In many cases it has been shown to enhance coping, reduced stress and burst resilient (Ghazinour, Richter, & Eisemann, 2003; Plante, Simicic, Anderson, & Manuel, 2002). Although they is no existing literature on the type of social support that is beneficial to the refugees and asylum seekers, there exist 4 main categories of social support (Wan, Jaccard & Ramey, 1996). Instrumental support (providing material help such as money, food and work), appraisal support (received feedback and self assessment from others who have face the same problems), informational support (advice and services), emotional support (caring, love and empathy). In stress and coping research, social support has been frequently divided into support from family members, friends and significant others. In light of this, an instrument constructed base on these three subscales has been developed (Zimet,

Dahlem, Zimet, & Farley, 1988). In this study, we look at how social support facilitates coping and quality of life among refugees and asylum seekers.

Self-efficacy

Self-efficacy refers to individuals self assessment of their ability to cope with stress. In a simple term, when people believe that they have the resources necessary to cope with stress, they have good self-efficacy. This ability is dynamic and situational, meaning it changes with time and in context. In general, it determine how an individual will feel, think and hence the level of his of her motivation (Bandura, 1994). In light of this, it therefore influences the sense of control over stress and choice of behaviours to engage or disengage with the stressful situation. It has been shown that, in precarious situation, people with high level of self-efficacy tend to used active coping strategies as compared to those with low level of self-efficacy (Salanova, Garu, & Martinez, 2006). Although there exist little knowledge on the perception of self-efficacy by refugees and asylum seekers, Benight and Bandura (2003) indicated that people from war trauma zone with good level of self-efficacy are capable of overcoming their traumatic situation thus establishing a mastery over the precarious situation. In this study we look at how self-efficacy enhances coping and quality of life among refugees and asylum seekers.

Multicultural attitude

Multicultural attitude refers to how people think, care and act about others in societies. This attitude is very important for a healthy integration in society especially from individuals who comes from a different cultural background to another. Indeed the psychological preconditions associated with multicultural attitude are very crucial for a proper multicultural integration. For example coping with stress in a multicultural context is different from coping with stress in a uni-culcultural context (P. T. Wong & J. C. Wong, 2005). Therefore a good level of multicultural attitude may be necessary for individuals to get along in a multicultural society. Although no studies have been carried out among the refugee population, Munroe and Pearson (2006) came up with an instrument that measure this attitude. In this study, we assessed the enhancing effect of

multicultural attitude on coping and equally how social support can indeed improved multicultural attitude.

Religion and spirituality

For the past decade religion and spirituality have emerged as one of the resources that shape and influence individuals ways of coping with stress. There are some studies that have established a good relationship between spirituality and wellbeing (Williams & Sternthal, 2007). When situations become difficult for individuals they turn to spirituality for their wellbeing and day to day functioning. In this perspective, it has been criticized since individuals may leave out proper intervention approaches such as medical and psychological care (Koenig, McCullough, & Larson, 2001). However, many refugees and asylum seekers find their faith in religion and spirituality as a way of coping with stressful situation. For example refugees with religious faith were found to be living a less stressful life (Plante, et al., 2002).

Quality of Life

Recently, quality of life has become an important aspect of research in the refugee population. As per definition, it refers to “individuals' perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns” (WHOQOL-BREF, 1996, p. 5). In light of this, quality of life includes psychological and physical health. Equally, individual’s social and environmental relation collectively determines their quality of life. Living a good quality of life is what individuals strive for. Therefore, individuals with precarious situation maybe deprived of a good quality of life. Recently, it has been demonstrated that Syrian refugees living in camps are living a poor quality of life (Aziz, Hutchinson, & Maltby, 2014). Here the refugees significantly scored lower on physical, psychological and environmental health. Furthermore, there is evidence suggesting that this poor quality of life is associated with maladaptive coping thus creating a series of various psychopathological manifestations ranging from depression, pain and somatic disorders

(Kinzie et al., 2012; Buhmann, 2014). Similarly, lack of social support has been associated with a poor quality of life among refugees and asylum seekers (Ghazinour, Richter, & Eisemann, 2004). In this study, we look at how coping and social support can predict the quality of life among refugees and asylum seekers.

Objectives of the Study

Review existing literature on coping with stress and quality of life

In this chapter, we will systematically review existing studies on coping with stress and quality of life among refugees and asylum seekers. We are particularly interested in the types of stress been research on, coping facilitators and their effectiveness in shaping coping strategies and reducing stress. The work is been presented in Chapter 3.

Assesses post-migrations stressors and PTED

Here, we aimed at sorting out various stressors refuges encountered in the host countries. These stressors have been defined under administrative, acculturation, social and financial stress. Equally, the severity level of Post-traumatic Embitterment Disorder (PTED) among this population shall be assessed. The study is been carried out in Chapter 4.

Social support, self-efficacy and multicultural attitude on coping

In chapter 5, we aimed at assessing the enhancing effect of social support, self-efficacy and multicultural attitude on coping. Here, we intend to establish the fitness of this model and show how it can be used in mental health service dedicated to this vulnerable population.

Social support and self-efficacy on multicultural attitude

In chapter 6 our main aim will be to assess the simultaneous predicting power of social support and self-efficacy on multicultural attitude. Here, the fitness of the model is established and recommendation made to mental health professional working with refugees in multicultural societies.

Social support and coping on the quality of life

In this section of the study, we look at how social support and coping interact with quality of life among refugees and asylum seekers. The model fit is established and recommendation made for health practitioners working with refugees and asylum seekers. The study is described in chapter 7.

Review of studies on treatment of stress related disorders.

In chapter 8, we aim at carrying out a systematic search of studies that have dealt with the treatment of stress related mental disorders among refugees and asylum seekers. We take into consideration which type of treatment is being offered, the sensitivity of the treatment, the type of stress related disorder and indicators used. While looking at the effectiveness of each treatment, we will make innovative proposition base on findings from this project and review of recent literature.

Method

Setting

Once every week refuges and asylum seekers will have the opportunity to encounter the researcher and answer the questionnaire. This encounter will take place at various centres for refugees in Luxembourg between 2011 and 2014. Also refugees living with families will be contacted together with those with no fixed housing. The centres are own and operated by Caritas and Red Cross Luxembourg.

Red Cross Luxembourg

The Red Cross in Luxembourg through its migration and refugee department operates three houses for the welcoming, orientating, social and psychological support of migrants seeking international protection in Luxembourg. The Don Bosco reception centre act as the first reception house for migrants that have introduced their international protection application at the ministry of foreign affairs. At the same time, the centre plays the rule of an emergency house for migrants seeking international protection but has not yet located the refugee department at the ministry of external affairs. The centre has the capacity of $N = 150$. The Red Cross migration and refugee department is equally in position of Félix chomé foundation house with a capacity of about $N = 60$. Here, priority is given to person with special needs (social, psychological, physical, educational etc) reason for which there is the presence of a permanent psychologist. In this centre, the team constantly organised educational, cultural and leisure activities for residents. Furthermore, there is equally Félix Schroeder centre with a capacity of $N = 50$. Here only single women with young children are admitted. At the same time, residents participate in different social, educational and cultural activities organised by the team of educators working in the centre.

Caritas Luxembourg

Caritas operate a centre which helps in orientating asylum seekers in Luxembourg through the presence of a sociologist. Equally in this centre, Muslim asylum seekers meet every Friday to practice their prayers. The centre also has a small capacity of hosting 10 to 15 people. Also, Caritas is in position of Saint Anthony's house with a capacity of N = 88. Here individuals and families seeking asylum are been housed and help by a divers group of educators. Help here is focus on health issues, procedures for seeking asylum, social, studies and leisure activities. At the same time, foyer Ulysses under Caritas equally acts as a centre for asylum seekers. Here they can take a free bath, tea and some food.

Sample

In 2012 the ministry of foreign affairs reported that more than 2000 people have filed for asylum in Luxembourg (See Annex 1 for refugee and asylum seekers statistics). In this perspective, we were engage in contacting at least 1500 asylum seekers with the hope of 1000 participating in the research project. With this participation level, we expect to have at least 700 questionnaires correctly filled. Equally, these asylum seekers come from more than 20 different countries according to reports from the ministry of foreign affairs. Therefore we intend to have a sample with a diverse cultural background. While other asylum seekers will be contacted in various sporting centres in Luxembourg, a majority will came from refugees centres own by Red Cross and Caritas Luxembourg.

Ethical considerations

Referring to the ethical consideration of the project, participation was on voluntary bases. Only mentally fit and conscious individuals took part in the study. Equally, the project is a continuation of the Research and Development (R&D 2003-11-02.) study that was validated by the ethical committee in Luxembourg.

Data Collection and Analysis

Qualitative

For the qualitative data, we created a list of semi structured interview items. That is, item that seeks information on the acculturation, financial, administrative and social situation in Luxembourg. The study will proceed by making used of snowball sampling. Intensive and multiple contacts will be made with participant across each representative group. With this, the inclusion of participants with different traumatic experiences will be assured (Bloch, 2007).We expect to make face to face interview with 50 refugees and asylum seekers. The interview protocol is set in a way that it can last for 2 to 3 hours. The part of the interview questions are both in English and French. The interviews that explored information about acculturation, administrative, financial and social difficulties will be recorded and latter on transcribed. Where there will be difficulties in understanding French or English, a translator will be used. The availability of translated materials and interpreters will allow individuals with limited knowledge in French and English to participate. The transcribed interviews will be analyzed with the help of WEFT QDA software. We will make used of content analysis. The choice of this software is directly associated to it simplicity to used and also given that we will not be dealing with very large amount of interview transcripts. Furthermore, the ability of the software to allow us to see code text in the original context, provide some statistics on the coded coverage, identify and record similarities and differences within code make it suitable for usage in our project.

Quantitative

Here, we will make used of existing questionnaires. Questionnaire used will be both in English and French. The Ways of Coping Questionnaire (WCQ) has been chosen among others because it measure the coping process rather than coping styles. Thus it is capable of assessing the actions individual use in coping with daily stressors. Furthermore, the Multidimensional Scale of Perceived Social Support (MSPSS) has been chosen given it

simplicity in administration attributed the number and nature of items in the instrument. The Monroe Multicultural Attitude Questionnaire (MASQUE) has been selected given the fact that its items capture the multicultural characteristics in Luxembourg. Additionally, Coping Self-Efficacy Scale (CSES) has been chosen base on the fact that it captures the self belief of diver's population to cope with on going stress. The choice of the quality of life (WHOQOL-BREF) also reflect it stability across multicultural population. Detail properties of each instrument are presented below.

Ways of coping questionnaire

The *Ways of Coping Questionnaire* (WCQ) (Folkman & Lazarus, 1988) consist of 66 items rated from 1 (Not used) to 4 (Used a great deal). These items are classified into 7 dimensions which include, confrontive coping (e.g. *let my feeling out somehow*), distancing (e.g. *went on as if nothing bad happen*), self-controlling (e.g. *I try to keep my feelings to myself*), seeking social support (e.g. *I got professional help*), accepting responsibilities (e.g. *criticized or lecture myself*), escape avoidance (e.g. *hope a miracle will happen*), planful problem solving (e.g. *made a plan of action and follow*), positive reappraisal (e.g. *found new faith*). The psychometric properties of this scale have been reported (Durak, Senol-Durak, & Elagöz, 2011). Although, the reliability of each scale keep on producing only acceptable scores (Nunally, 1978), they are still used and accepted in the clinical field. For instance, in an Iranian population, alpha values were .78, .79, .76 and .72 for seeking social support, planful problem solving, positive reappraisal and accepting responsibilities respectively (Padyab, 2009). Seeking social support, planful problem solving, positive reappraisal and accepting responsibilities are more likely to associate with a good mental health (Folkman & Moskowitz, 2004). In light of this, we will focus on these four sub-scales for the work at hand.

Social support questionnaire

The *Multidimensional Scale of Perceived Social Support (MSPSS)* (Zimet, Dahlem, Zimet, & Farley, 1988) consists of 12 items on the likert scale. The scale ranges from 1 (strongly disagree) to 7 (very strongly agree). For the work at hand, we limit ourselves to 6 (strongly agree). This limitation is in line with other study where there was no effect on

the scale limitation. Indeed reliability is maintained between a 4 and 6 point likert scale. Increasing the scale beyond 6 point does not necessary affect reliability (Chang, 1994) Furthermore, these items falls in one of the following dimensions: support by friends (FR) (e.g. *I can talk about my problem with my friends*), support by family (FA) (e.g. *my family is willing to help me make decisions*), support from significant others (SO) (e.g. *there is a special person who is around when I am in need*). Through internal consistency and factorial validity, the MSPSS has been shown to have good psychometric properties (Canty-Mitchell & Zimet, 2000) For instance, the scale has been validated in Thailand with total score $\alpha = .87$. For each sub-scale, $\alpha = .84$, .85 and .74 were obtained for FR, FA, SO respectively (Mongpakara, Ruktraku, & Mongpakara, 2011)

Multicultural attitude questionnaire

The *Munroe Multicultural Attitude Scale Questionnaire (MASQUE)* (Munroe, 2003; Munroe & Pearson 2006). This was first developed as a 28 items then latter on reduced to 18 items rated on a likert scale which ranges from 1 (strongly disagree) to 6 (strongly agree).The items belongs to one of the following dimensions, Know (e.g. *I understand religious belief may differ*), care (e.g. *I care about respecting divers cultural values*) act (e.g. *I act the same with each an everyone regardless of his or her economic status*). Although we administered the 28 items, it was latter on reduced to 18 through factorial analysis thus corresponding to Munroe and Pearson (2006) new version. In a student population sample, alpha values of .70, .70 and .58 were obtained for know, care, act subscales respectively. A total scale alpha was .80. (Munroe & Pearson, 2006).

Self-efficacy questionnaire

The *Coping Self-Efficacy Scale (CSES)* (Chesney, Neilands, Chambers, Taylor, & Folkman, 2006) consists of 26 items on a scale ranging from 0 (cannot do at all) to 10 (certain can do). Further analysis has filtered 13 items that belongs to problem focus coping (6 items), stop unpleasant emotions (4 items) and thoughts and getting support from family and friends (3 items) dimensions. Through internal consistency and factorial analysis, the 13 items have proven good psychometric properties though in a population with different type of stressors. For example, in an HIV seropositve sample suffering

from depression, alpha values of .91, .91 and .80 for problem focus, emotional thoughts, and friends/family support were obtained respectively (Chesney et al., 2006).

Post-Traumatic Embitterment Disorder questionnaire

Post-Traumatic Embitterment Disorder Questionnaire (PTED) was chosen first because they is an English version. Secondly its internal consistency and reliability (alpha > .80) are reported to be high and satisfactory though in a different population other than refugees and asylum seekers (Linden, Bauman, Liberei, & Rotter, 2009). We therefore expect to produce good psychometric properties with the refugee sample. The PTED instruments consist of 19 items with each item rated on the likert scale ranging from 0 (not true at all) to 4 (extremely tru*e*) with higher scores indicating the severity level of PTED. As a cut-off score, mean total scores ≥2.5 indicates clinically significant posttraumatic embitterment disorders (Linden et al., 2009).

The quality of Life questionnaire (WHOQOL-BREF)

The *World Health Organization Quality of Life* (WHOQOL-BREF, 1996) consists of 26 items with a five point rating scale: 1 = very dissatisfied, to 5 = very satisfied. The scale is made up of two general items and four sub-scales, that is psychological dimension (e.g. *are you able to accept your bodily appearance*), physical health dimension (e.g. *do you have enough energy for everyday life*), environmental dimension (e.g. *how healthy is your physical environment*) and social relationship dimensions (e.g. *how satisfied are you with your personal relationship*). The WHOQOL-BREF has been validated across many cultures, for example Rocha, Power, Bushnell, and Fleck (2012) carried out a cross-cultural validation consisting of 6 different countries. Equally, the creation and validation of this instrument did include sample from many different cultural background as an attempt to guarantee its cultural stability functioning (Skevington, Lotfy, & O'Connell, 2004). The first two items on this instrument aim at seeking general information on health. While the psychological, physical and environmental dimensions were included in the evaluation of the model, the social relation domain was used only in descriptive and multivariate statistics. In substance abused population, the instrument has been validated in Thailand with alpha values as follows .79, .78, .76, .87 for physical health,

psychological health, social relations and environmental domains respectively (Fu et al., 2013).

Data analysis

With the help of descriptive statistics, socio-demographic information of the sample will be described. Also the mean scores and standard deviations of each sub-scale will be calculated and associated with some of the socio-demographic variables such as gender, length of stay in the host country and marital status. Furthermore, with the help of multivariate analysis (MANOVA) gender and marital status will be computed against the quality of life and coping. Assuring the validity and the internal consistency, each sub-scale instruments will be subjected to Cronbach's alpha calculations and factorial analysis. Factorial analysis will make used of component analysis with varimax rotation approach. Evaluating the predicting power of each variable in the specified model (see objective), Structural Equation Model (SEM) will be performed and the model fit evaluated. The structural equation model will be done and analyzed base on recommendation from Kline (1998). All statistical analysis will be done with the used of SPSS 17 and Mplus-5. Referring to the choice of approximate fit indices for the structural equation modelling, we will make used of the Root Mean Square of Approximation (RMSEA) which is a parsimony-corrected index with 90% confidence interval. Also the Comparative Fit Index (CFI) that measures the relative improvement in the fit of the constructed model over the baseline model will be used. Furthermore, the Root Mean Square Residual (SRMR) which relate to the correlation residuals will be used. Base on values obtained from these indices we will be able to judge our model fit by comparing these values to recommended ones.

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Part 1

Assessment of Post-Migration Stress, Post-Traumatic Embitterment Disorder, Coping and Quality of Life among the Refugee Population

Part 1 of this work consists of Chapter 2, 3 and 4. In chapter 2, the theoretical background and the problematic of the study is been stated down. Chapter 3 consists of literature review that focuses on the trends of coping with stress and quality of life. Chapter 4 focuses on indentifying post-migration stressors and the severity of Post-Traumatic Embitterment Disorders (PTED) among refugees.

Chapter 2

General Introduction

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Conference

Ndzebir, A. V., Lemétayer, F., & Schiltz, L. (2012). Stress, coping and multicultural attitude: Analysis on the used of coping strategies by adults refugees and asylum seekers in Luxembourg. *Poster presented at the 26th Conference of the European Health Psychology Society* - Prague, 21-25 August.

Conference with act

Ndzebir, A. V., Lemétayer, F., & Schiltz, L. (2012). Stress, coping and multicultural attitude: Analysis on the used of coping strategies by adults refugees and asylum seekers in Luxembourg. *Psychology & Health, 27,* (sup1), doi: 10.1080/08870446.2012.707817

Background of the study

Previous studies on stress and coping among vulnerable groups have shown that the context at which the process is taking place remains crucial in providing us with a detailed understanding and maximization of available psychological support. Lam and Zane (2004) acknowledge the rule of culture and ethnicity in coping. Starting from basic definitions, most authors have embraced the environment in order to clearly conceptualize their terms (P. T. Wong & J. C. Wong, 2005). In this study, psychological stress will be considered as the "relationship with the environment that the person appraises as significant for his or her wellbeing and in which the demands tax or exceed available coping resources" (Lazarus & Folkman, 1986, p. 63). Although the definition by Lazarus and Folkman (1986) did not directly implicate the context, this study dares to draw attention to the multicultural, social, self-efficacy and quality of life variables. Also, coping will be considered as "the thoughts and behaviors used to manage the internal and external demands of situations that are appraised as stressful" (Folkman & Moskowitz, 2004, p. 745). Therefore adjusting in an environment on one part greatly depends on how an individual constructs and executes his or her coping strategies. Furthermore, self-efficacy shall be considered as individual thoughts on his or her abilities to manage events that are stressful (Bandura, 1988). At the same time, social support shall refer to available external resources that can facilitate the use of coping strategies (Thoits, 1995). With the individual environment taking the centre of stress and coping concepts, an obvious question will seek whether refugees and asylum seekers in a multicultural milieu will present a difficult and distinct pattern in this process of adjustment. This project therefore argues that the multicultural context will present an additional variable which influence the coping strategies. The argument is in line with the systematic constructive theory for culture where a person constructs his or her knowledge by considering experience as reality in reference to the interaction with the environment (Fergus & Reid, 2001, 2002; Mahoney, 1991). Consider Figure 1 for the process of adaptive coping and quality of life.

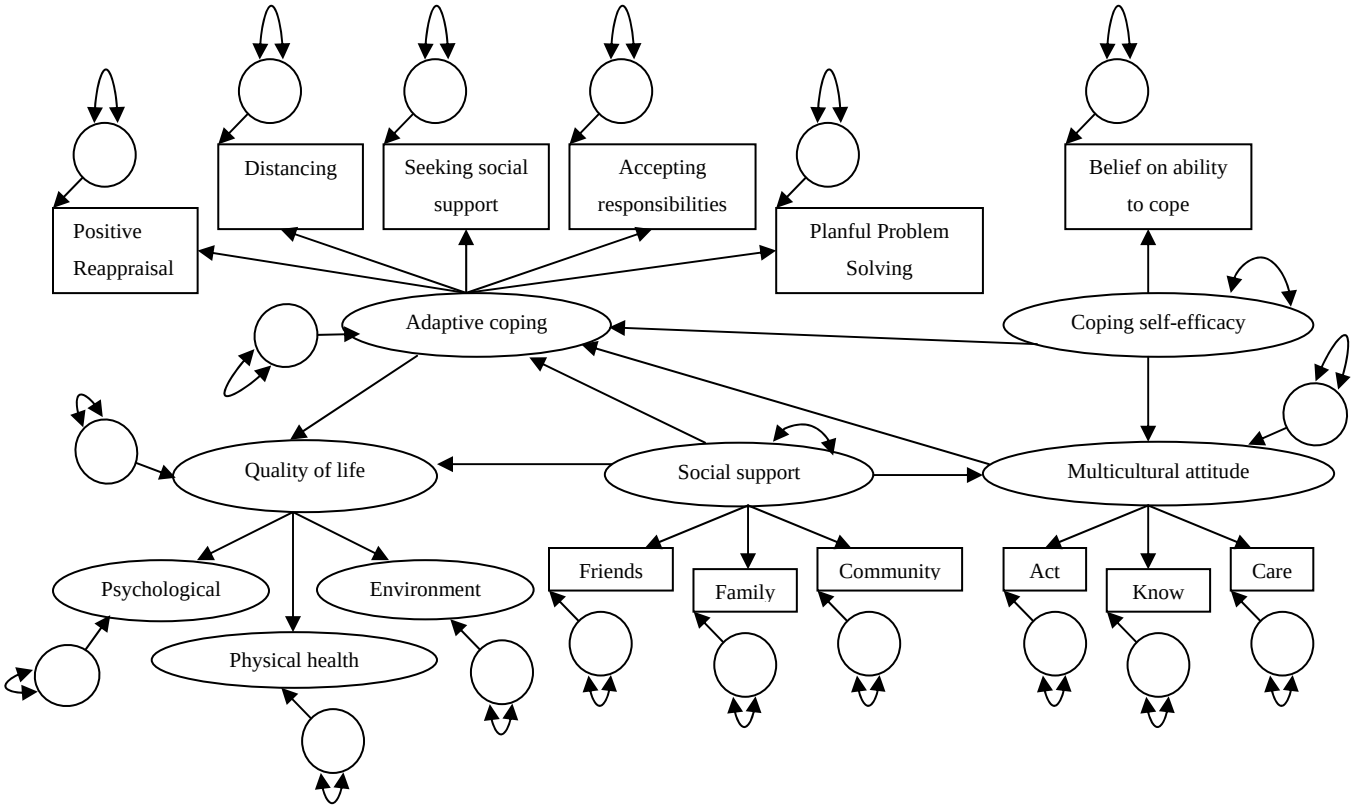

Figure 1. Proposed model for adaptive coping process

In most previous studies, it has been shown that adaptive coping and social support may have a positive impact on the quality of life among refugees and asylum seekers (Slavin, Rainer, McCreary, & Gowda, 1991; Teodorescu, Heir, Hauf, Wentzel-Larsen, & Lien, 2012). Therefore for the work at hand, the quality of life will be treated as "individuals' perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns" (WHOQOL-BREF, 1996, p. 5). While a refugee is considered as "a person who has a well founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion and who is outside the country of his nationality and is unable or owing to such fear unwilling to avail himself of the protection of that country" (UNHCR, 2007, p. 7), an asylum seekers is literally considered as a person seeking the refugee status which maybe granted or refused depending on the fulfilment of conditions set in the definition. In this work, the refugee and asylum concepts shall be used interchangeably. Psycho-socially speaking, asylum

seekers are already refugees once they leave their countries base on the reasons set fort by the UNHCR (Weaver & Burns, 2001).

According to research carried out by Slavin, Rainer, McCreary and Gowda (1991), a multicultural refugee is subjected to a difficult life where the acculturative stress for him or her who has experienced war, imprisonment or torture is greatly high. Therefore, the mental health situation of refugees is at steak due to force migration triggered by persecution or violence (Gavagan & Brodyaga, 1998). Furthermore suicidal risk behaviors are prevalence among asylum seekers (Steel et al., 2009). This group of individuals calls for concern in a multicultural sensitive environment since there is evidence that the multicultural variable constitute an additional challenge for refugees and asylum seekers. "Stress must be viewed in context, both cultural and situational" (P. T. Wong & J. C. Wong, 2005, p. 5). In line with coping in a multicultural context, the study at hand argues that cognitive behavioral therapy and other treatment approaches can be adapted and employed among refugees and asylum seekers based on the relationship between coping, multicultural attitude, social support, self-efficacy and quality of life. Cognitive Behavioral Therapy (CBT) reduces stress, anxiety and depression among asylum seekers and refugees (Basoglu, Ekblad, Baamhielms, & Livanou, 2004; Basoglu, 2006). Therefore with adapted cognitive therapy in place, the acculturation process of this group in such an environment like the case of Luxembourg can be facilitated thus enhancing their resilience. This is so because, taking culture to the centre stage of diagnostic and intervention process among individuals in a multicultural context remains an important step towards efficacy (Dana, 1998b, 2000b). Furthermore, some researchers have treated the concepts of stress and coping by considering social support and self-efficacy as the influential variables (Folkman & Lazarus, 1988) few have considered the multicultural variable or simply the context (P. T. Wong & J. C. Wong, 2005). Though the search for cultural fairness has intensified in the field of diagnostic and intervention, the issue remains a complex since the knowledge on what constitutes the cultural fairness itself is unclear (Samuda, 1998) and at the same time vague. With this in mind, the pressing issue maybe to search for approaches that will go a long way in compensating for this variable and thus rendering the diagnostic and intervention approach culturally fair to a certain degree. In this respect, a culturally fair approach will

stand a chance of being more effective and less biased. While attention has been focused on cultural variable, Padilla (2001) affirmed that integrated researches where qualitative and quantitative methods are used represent a greater chance of handling the cultural variable with a high degree of fairness. Therefore this project has the potentials of demonstrating that despite the complex studies where multicultural variable is taken into consideration, proper qualitative and quantitative orientated approaches can further contribute in clearing the puzzle that is hampering the field of cross-cultural, health and clinical psychology. Folkman & Lazarus (1988) questionnaires assess confrontive, distancing, self-controlling, seeking social support, accepting responsibility, escaping avoidance, planful problem solving and positive reappraisal coping factors. The present study argues that the multicultural attitude needs to be considered as shaping these coping strategies. Furthermore, some researchers have treated the concepts of stress and coping by considering social support and self-efficacy as the influential variables (Folkman & Lazarus, 1988). Few have considered the multicultural variable or simply the context (P.T. Wong & J.C. Wong, 2005). At the same time, there are few concrete studies on coping with stress and quality of life. Moreover, Luxembourg which is multicultural in context presents a suitable ground for realizing this project.

Under the framework of research and development in Luxembourg, Schiltz, Houbre, Martiny (2007) carried out comparative studies on vulnerable sub-groups including refugees and asylum seekers. Their findings reveal that, the level of anxiety for the refugee sub-group was high. At the same time, their studies indicated that depression and poor quality of life is a major concern among refugees and asylum seekers. These are stress driven psychological problems. Interesting enough, there was evidence that these sub-groups are victims of psychological burdens that are capable of self-directing them towards suicidal behaviors, violence and drugs attitudes (Schiltz, Houbre, & Martiny, 2007, p. 466). Although Schiltz, Houbre and Martiny (2007) findings have paved the way for this project, the issue of coping process where the multicultural, social and self-efficacy variable are playing a part represents the centre of the present project since their research did not consider these variables that intend act by enhancing a good quality of life. At the same time, research shows that maladaptive coping strategies are associated with poor mental health and vice versa (Endler & Parker, 2000; Lazarus & Folkman,

1984). With this in mind, adaptive coping could be rewarded with resilience (Zautra, Hall, & Murray, 2008) thus leading to successful resolution of stressful life events (Zautra & Reich, 2011, p. 175). This study emphasizes on the refugees and asylum seekers sample which goes in line with the increased number of refugees and asylum seekers in western Europe (UNHCR, 2013a, 2013b) and Luxembourg in particular (Ministry of external affairs, 2013). Still on the same line of urgency, the united nation agency of refugee in 2013 reported an influx of 212,599 asylum seekers in industrialized nations between January and June of 2013 with Luxembourg already hosting 1071 from the month of January to December 2013 base on statistics from the ministry of external relations. See Appendix 1 for statistics.

Still on the same line of research, L. Schiltz and Schiltz. J. (2008) succeeded in establishing a theoretical model that governs the link between biographic traumatic events and exclusion including marginalization.

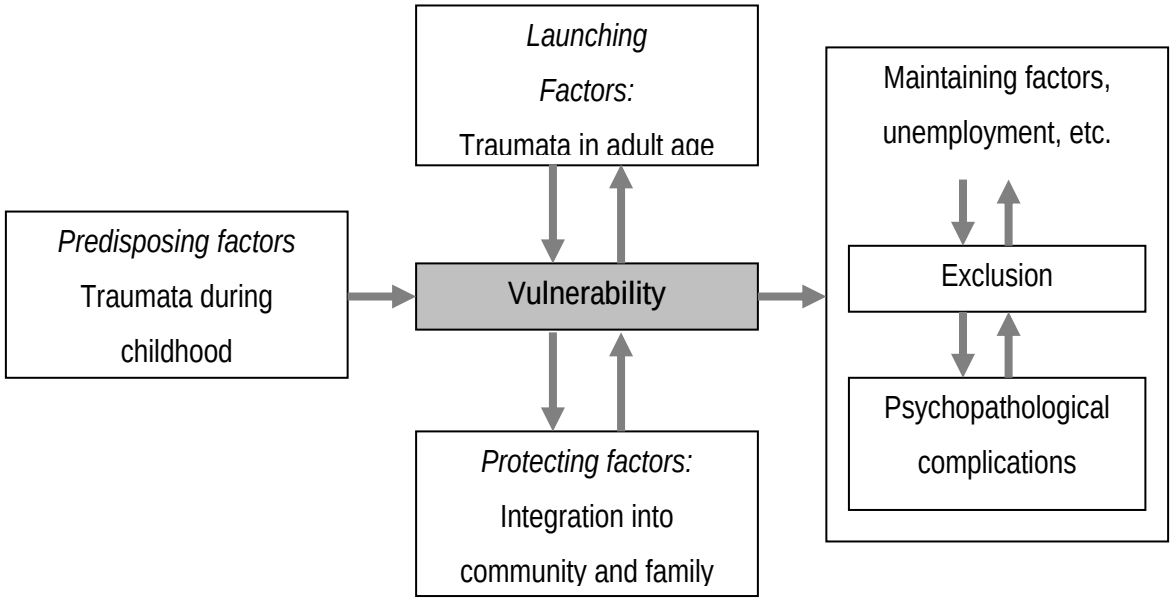

Figure 2. A model showing the relationship between psychological trauma and exclusion. (L. Schiltz & J. Schiltz, 2008, p. 185)

With Figure 2 model, this study argues that integration or acculturation into the community which may take the form of adjustment is greatly dependent on the context of

the community. “The inability of clinicians to incorporate culture into every micro decision does not make culture any less influential” (Ridley, Tracy, Stephens, Wimsatt & Beard, 2008, p. 29). Therefore the multicultural, social support, self-efficacy, coping and quality of life variable remains unavoidable when looking for proper intervention approaches that will facilitate the healthy integration of refugees and asylum seekers into societies. This is in line with P. T. Wong and J.C. Wong (2005) conceptual approach, “any theoretical model, any empirical finding and any claim of truth must be examined through the lens of multiculturalism” (P. T. Wong & J. C. Wong, 2005, p. 4). With this, reducing their (refugees and asylum seekers) cognitive distortions as well as the burden of the society remains an issue to be handled with urgency. Therefore seeking to know how coping is simultaneously affected by multicultural, social support and self-efficacy variables remain crucial for effectively adaptation of various cognitive behavioural treatments that can facilitate the integration of refugees and asylum seekers to societies thus improving their quality of life. This approach of considering various intervening variables in order to adapt cognitive behavioural treatment is not new (Cohen & Mannarino, 2006; Dana, 2000a; Hays, 2009).

Research Questions

This research project dealt with the following questions

1. What are the trends in the research of coping with stress and quality of life among refugees and asylum seekers? Which stressors exist among refugees and asylum seekers? Is Post-Traumatic Embitterment Disorders (PTED) a problem among refugees and asylum seekers?
2. How do social support, multicultural attitude and self-efficacy simultaneously influence coping with stress among refugees and asylum seekers? Is there any predicting effect of social support and self-efficacy on multicultural attitude among refugees and asylum seekers? Do adaptive coping with stress and social support predict quality of live among refugees and asylum seekers? How do the model with adaptive coping and quality of life enhanced by social support, multicultural and self-efficacy variable fit to the data? How do gender, marital status and length of stay in the host country relate to coping and quality of life?

Base on the evaluated models, can we construct an innovative treatment approach that can be employed among refugees and asylum seekers such as to reduced their stress related disorders?

Answering these questions, refugees and asylum seekers through the Red Cross and Caritas refugee department in Luxembourg participated by answering a series of questionnaires. For this reason, these two settings in Luxembourg will be further described.

Setting

The Red Cross in Luxembourg through its migration and refugee department operate three houses that welcomes, oriented, provide social and psychological support to migrants seeking international protection in Luxembourg. The Don Bosco reception centre act as the first reception house for migrants that have introduced their international protection application at the ministry of foreign affairs. At the same time, the centre plays the role of an emergency house for migrants seeking international protection but has not yet located the refugee department at the ministry of external affairs. The centre has the capacity of $N = 150$. The Red Cross migration and refugee department is equally in position of Félix chomé foundation house with a capacity of about $N = 60$. Here, priority is given to person with special needs (social, psychological, physical, educational etc) reason for which there is the presence of a permanent psychologist. In this centre, the team constantly organised educational, cultural and leisure activities for residents. Furthermore, there is equally Félix Schroeder centre with a capacity of $N = 50$. Here only single women with young children are admitted. At the same time, residents participate in different social, educational and cultural activities organised by the team of educators working in the centre.

Equally, Caritas is in position of Saint Anthony's house with a capacity of $N = 88$. Here individuals and families seeking asylum are been housed and help by a divers group of educators. Help here focuses on health issues, procedures for seeking asylum, social and education with leisure activities.

Thesis Outline

An overview of the thesis consisting of 9 chapters divided into 3 distinct parts will be provided. The first part is made up of chapter 2, 3 and 4. Chapter 2 consist of theoretical background and problematic of the study at hand. Chapter 3 consist of research question regarding past and present trends on coping with stress and quality of life among refugees and asylum seekers. Chapter 4 focuses on post-migration stressors and PTED among refugees and asylum seekers.

In chapter 3, the study focus on evolutional changes that have taken place through out the research process on stress and quality of life among refugees and asylum seekers. Here, the focus is on conceptual changes including newly treated variables that are simultaneously mediating between stress and quality of life. The evolutionary change in the concept of stress among vulnerable groups is generally accepted. However, little is known about past and recent studies that have properly exploited this domain. The study at hand through a systematic exploitation of existing psychological data base will identified new variables and their mediating effect on stress and quality of life among refugees and asylum seekers.

In chapter 4, the study focuses on various post-migration stressors and PTED among refugees and asylum seekers. Through semi-structure interview, stressors originating from acculturation, administration, economic and social variables are targeted. These are post-migration stressors. The presence of PTED among refugees and asylum seekers is also examine in this chapter with the help of an existing measuring instrument. With the help of content analysis, the study sorted stressors by category and frequency. And through statistical analysis, the severity of PTED is evaluated.

The second part of this work consisting of chapter 5, 6 and 7 involves the used of validated questionnaires. Here, the study proceeds through quantitative approach.

In chapter 5, through structural equation modeling, the study simultaneously assesses the predicting power of social support, self-efficacy and multicultural attitude on coping with stress. For social support, the study make used of Multidimensional Scale of Perceived Social Support (MSPSS) **(**Zimet, Dahlem, Zimet, & Farley, 1988), Chesney, Donald, & Folkman (2010) for Coping Self-Efficacy Scale (CSES), Munroe (2003), Munroe and Pearson (2006) for Multicultural Attitude Questionnaire (MASQUE), Folkman and

Lazarus (1988) for Ways of Coping Questionnaires (WCQ). A simultaneous assessment of the effect of these three variables has gain grounds in the literature of stress and coping (Endler & Parker, 2000; Endler, Parker, Johnson, & Flett, 2002; P. T. Wong & J. C. Wong, 2005) however studies that have set out to do proper and innovative investigation are scanty. Especially in the refugee and asylum seekers sample. Therefore under this chapter, the importance of these three variables on coping with stress will be simultaneously assessed.

In chapter 6, the predicting effect of social support and self-efficacy on multicultural attitude is been assessed. Here the interest will be on investigating whether good level of social support and self-efficacy can leads to positive multicultural attitude. There could be smooth integration of refugees and asylum seekers to the community thanks to their positive multicultural attitude (Slavin, Rainer, McCreary, & Gowda, 1991).

In chapter 7, the predicting effect of social support and adaptive coping on quality of life among refugees and asylum seekers is assessed. Assessing the quality of life, the study makes use of WHOQOL-BREF (1994a, 1996) questionnaires consisting of psychological, physical health, environmental and social dimensions. Generally, good quality of life promotes a general wellbeing among vulnerable groups. Gender, marital status and length of stay in the host country is also check against quality of life and coping

Part 3 of this work consists of Chapter 8 and 9. In chapter 8, a systematic review of literature consisting of various treatment approaches of stress related disorders among refugees and asylum seekers is been carried out. Here, the successes and failures of each treatment approach is critically examined. Innovative propositions to be considered for the treatment of stress related disorders among refugees and asylum seekers are table out by making reference to findings from chapter 3, 4, 5, and 6 together with other existing potential literature. This is in line with literature from Bernal, Jimenez-chafey and Rodriquez (2009).

In the last chapter (9), a constructive synthesis of all the chapters is presented with recommendations for researchers and practitioners base on knowledge gathered through out the study at hand and other innovative related published research works. Therefore closing the gap between research and clinical intervention shall be a sole focus of this

chapter (Coyne & Racioppo, 2000). Finally, the limits and suggestion for further research are discussed. The last part of this research project consists of a summary of all the chapters. All chapters are presented in scientific conference and submitted for publication in international journals.

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Chapter 3

Coping with Stress and Quality of Life among Refugees and Asylum Seekers: A Systematic Review of Literature

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Article

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Abstract

The objectives of this review were to provide an overview of research on stress, coping and quality of life among refugees and asylum seekers. The study performed a systematic search of literature through PsycARTICLES, PsycINFO and other reference papers. Papers selection proceeded by categorization and elimination on the bases of pre-established criteria: researchable stress, coping including their facilitators and quality of life. Twenty nine studies were included in the review. Although most of the studies dealt with PTSD, a few did combine it with other psychological distress including acculturation stress. Despite recommendations to simultaneously handle stress and coping, only nine studies followed the recommendations. Coping enhancers were social support in nature. Furthermore, only one study investigated quality of life, PTED and CPTSD among refugees and asylum seekers. There appear to be no clear direction in the coping and stress research among refugees and asylum seekers. Moreover, the quality of life among this vulnerable group is neglected. Suggestions for future research are discussed.

Keywords: Quality of life, stress, coping, refugees, asylum seekers

Introduction

There is high risk of mental health problems among refugees and asylum seekers (Fazel, Wheeler, & Danesh, 2005; Johnson & Thompson, 2008) the reason for which health practitioners and psychologist are becoming more concern about this vulnerable population. Studies have identified stress as the major force behind this poor mental health (Steel, Silove, Bird, Mcgorry, & Mohan, 1999). The stress come in most cases as a result of war, ethnic and political oppressions including torture from their countries of origin. In this perspective, Post-Traumatic Stress Disorders (PTSD) is estimated at 70% among asylum seekers and refugees community sample (Gabel, Ruf, Schauer, Odenwald, & Neuner, 2006; Johnson & Thompson, 2008). Equally, many take risky and traumatizing means of transport such as risky boats and risky boarder crossings with no security (Mansouri & Cauchi, 2007). At the same time, arriving in countries where they are seeking protection, there is equally confrontation with administrative, financial, social and acculturation stress (Roytburd & Friedlander, 2008). All these societal changes may lead to Post-Traumatic Embitterment Disorders (PTED) (Linden, Rotter, Bauman, & Lieberei, 2007). At the same time, there is post-migration stress driven by lack of legal status, fear of repatriation for asylum seekers (Silove, Steel, & Watters, 2000; Steel, Mares, Newman, Blick, & Dudley, 2004). With this in mind, the life of a refugee and an asylum seeker is thus characterized by stress driven factors which leads to anxiety and depression thus impeding their psychological and cultural adaptation (Berry, 2005). Given that stress remains an unavoidable part of this population as they struggle to reconstruct their lives, much attention is tilted towards coping with it (Folkman & Moskowitz, 2004), moderating variables and behavioral outcome (Nock et al., 2008). This explained why there exist a multitude of studies that focuses on coping and stress simultaneously. For instance when Lazarus & Folkman (1984) came up with one of the most accepted conceptual definition of stress, coping alone stood as an integral part of stress. Although few studies have correlated adaptive coping to good quality of life, Morrison & Bennett (2006) conducted a series of studies which shows that social support as one of the adaptive coping facilitator do have a positive impact on the general well-being. Coping itself consists of internal and external resources available for stress

buffering (Folkman & Lazarus, 1988). Although the role played by coping in the general well-being of refugees and asylum seekers is widely accepted, there is lack of studies that track down major development in this field of study. Drawing attention to this vulnerable group, the United Nations High Commission for Refugees (UNHCR) in 2013 reported an influx of 212,599 asylum seekers in industrialized nations. Equally, base on statistics from the ministry of external relation in Luxembourg, the country in 2012 hosted 2056 asylum seekers and 1071 in 2013. See Appendix 1 for details. At the same time, researchers hold conflicting ideas as to which aspect of coping is beneficial to the lives of refugees and asylum seekers. There is equally little knowledge on effective facilitators of coping and quality of life among asylum seekers and refugees.

The objectives of this review were therefore: 1) to present research on coping by sorting out various coping facilitators 2) to sort out various researchable stress among refugees and asylum seekers 3) to shade light on available research on the quality of life among refugees and asylum seekers.

Method

Using the search term “stress, coping, quality of life, asylum seekers and refuges”, the study proceeded by searching the PsycARTICLES, PsycINFO, PubMed database including journals such as American psychologist and journal of refugee studies. The search on these databases took place between September and December of 2012. Given that coping itself is enhance by many variables, the study equally included search terms such as “Coping facilitators” equally “impact of coping on quality of life” were introduced in the database. As the study intended to track down research on stress, coping and quality of life among refugees and asylum seekers, the concept “Research approaches on stress and coping” were also introduce in the database. The study equally included empirical papers that have directly treated the concept of stress by evoking external resources such as culture and social support.

In theory, there exist a great distinction between daily life stress and Post-Traumatic Stress Disorders (PTSD) that is greatly driven by war, oppression and torture (Lazarus, 1999). Although PTSD can shape the way people cope with normal daily life stress (Nock et al., 2008), the study at hand equally include the daily life stress experience by

asylum seekers and refugees when their arrived in their host country. This is because these daily stressors may results in Post-Traumatic Embitterment Disorders (PTED) (Linden et al., 2007) while maintaining and relapsing PTSD (Ryan, F. Kelly, & D. B Kelly, 2009; Steel et al., 2009). In relation with this, papers that dealt with PTSD were equally included in the review. Base on the abstract of each article, one of the authors (PhD Student) proceeded with the selection. Equally selection was done on the basis of the whole article when the abstract alone could not provide enough information for inclusion or exclusion. To remain in line with the selection criteria set forth, an Assistant Student Psychologist (ASP) at the University of Luxembourg was consulted in situations where the article inclusion or exclusion decision was ambiguous.

With the search terms describe earlier, 401 papers pop up from the data base. Bases on the inclusion and exclusion criteria in Box 1, 20 articles were selected. Base on the selected papers, another data base search was launched that yielded 80 articles of which 8 falls within the inclusion criteria set forth. Finally, 29 studies were included in the review. The independent reviewer (Student Psychologist SP and ASP) classified the articles by making reference to the inclusion-exclusion form (Box 1). The form was developed by one of the author (PhD Student) and discussed with other reviewers (SP, ASP) for modifications and consensus. Therefore the bases of the form were an extensive literature review and consultations from other reviewers. Each reviewer was therefore entitled to complete the established form (See box 1) after reviewing each article. The completed forms were then compared and any differences clarified. Base on the two aspects, the studies were classified as follows (1) coping facilitators among refugees and asylum seekers (2) types of stress (3) quality of life among refugees and asylum seekers.

Psychological stress generally refers to an individual relationship with the environment for which is appraised as significant for his or her wellbeing and the demands may exceed the available coping resources (Lazarus & Folkman, 1986, p. 63). Here, the environment influence the individual and vice versa. The study therefore focuses merely on ongoing problems hosted by the structure of the social environment (Wheaton, 1996, p. 57). On the other hand, coping involves the thoughts and behaviors used to manage the internal and external demands of situations that are appraised as stressful (Folkman & Moskowitz, 2004, p. 745). In this perspective, coping is viewed as a process of homeostasis

restoration (Lazarus, 1966) but from a developmental perspective, coping results in either positive or negative changes or both (Aldwin, Sutton, & Lachman, 1996). Implying that a positive change is rewarded by resilience. Also, quality of life refers to individuals' perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns (WHOQOL-BREF, 1996, p.5). In many studies of stress, they have been repeated calls for consideration of various coping facilitators. For instance there exist a correlation between coping and personality (Somerfield & McCrae, 2000). Secondly social support plays a beneficial rule in vulnerable groups with stressful life events (Fleming, Baum, Gisriel, & Gatchel, 1982; Sorkin, Rook, & Lu, 2002). Thirdly, there have been acknowledgements of cultural differences in coping with stress (Folkman, 2010; P. T. Wong & J. C. Wong, 2005). Therefore the social context in which stress and coping takes place needs to be considered, since societal factors influence the stress process (Folkman, 2010, p. 5). In light of this, the vulnerability of refugees and asylum seekers to stress remains unquestionable. The review at hand laid emphasis on the effectiveness of these coping facilitators among refugees and asylum seekers.

Box 1

Form used for selection and classification of articles

Reviewers:	Student Psychologist (SP) Assistant Student Psychologist (ASP)
Title of paper:	
Authors:	
Year of publication:	
Does the study fulfill the inclusion criteria?	Yes No
Do the study deals with stress and coping?	Yes No
Is the population of study a vulnerable group?	Yes No
Is this vulnerable group refugees and asylum seekers?	Yes No
Is the study about stress and coping moderators?	Yes No
Does the study provide information on quality of life?	Yes No
General wellbeing of refugees and asylum seekers?	Yes No
Type of research:	Descriptive Experimental Survey
Are various coping moderators described?	Yes No
If yes, which ones? …	
How do they moderate stress and coping?	Positive Negative Both

After a thorough process of classification base on the themes set up in the form above, the study proceeded by making a synthesis of various descriptive and empirical works.

Box 2

Recommendations for conducting effective studies on stress and coping among refugees and asylum seekers

A. There should be contextual considerations
B. Individual differences should be considered
C. Gender differences should be considered
D. Multicultural variable should be considered
E. Cultural differences should be considered
F. Studies should take longitudinal form
G. Biological systems should be considered
H. Stress and coping should be investigated simultaneously

Classification of studies

The study equally proceeds by classifying the position of various studies on stress and coping with their application to the refugee and asylum seekers population if any. This classification goes in line with literature from Aldwin (2007). Here, there is evidence of over 186,000 studies on stress and more than 36,000 on coping as of 2007. Despite this large number of studies, just a few of them are dedicated to the refugee and asylum seekers population. Up to date, there exist no estimate on the number of studies that have treated stress and coping among refugees and asylum seekers despite a large number of papers dedicated to the mental health situation of this vulnerable population.

Results

Referring to the 29 studies included in the review, 23 were merely descriptive, survey and comparative while 6 took an experimental approach. While a few number of these studies treated daily stress among refugees and asylum seekers, many were devoted to the study of PTSD. Studies of PTSD were simultaneously carried out among other psychological

problems such as depression and anxiety but only PTSD aspects were included in the review. Equally, 9 studies included coping facilitators which were merely social support in nature. For example religious coping were constantly exploited either as risk or protective factors against stress (Leaman & Gee, 2011) or simply social support as one of the coping facilitators (Renner, Laireter, & Maier, 2012). While many studies were transversals, there were just two studies that took an experimental longitudinal approach. In most of these studies, positive implications of the considered facilitator were reported.

The study will now address the question of 1) research on coping 2) types of researchable stress and 3) quality of life among refugees and asylum seekers. Detail information from the selected studies is displayed in Table 1.

Table 1
Details from studies included in the review

Reference	Type of study	Participants	Type of stress	Coping facilitator	Quality of life	Outcome
Gerritsen et al., (2006)	Experimental survey	178 refugees, 232 asylum seekers	PTSD & post-Migration stress	Social support	NO	Low social support link to PTSD and Post-migration stress
Mueller et al., (2010)	Survey comparative	40 fail ,40 asylum seekers	PTSD	Non	NO	High PTSD in both samples
Strijk et al., (2011)	Survey	30 refugees	Psychological distress	Non	NO	Severe psychological Distress among refugees
Maercker et al., (2009)	Survey	61 refugees	PTSD	Social acceptance	NO	Social acknowledgment negatively relate to PTSD.
Roytburd & Friedlander (2008)	Survey	108 refugees	Acculturation stress	Non	NO	Acculturation proportional to time spend in the country
Miller & Rasmussen (2010)	Descriptive	War & conflict victims	Daily stressors	Non	NO	Intervention should go beyond PTSD to address ongoing distress
Coffey et al., (2010)	Survey	17 detained asylum seekers	PTSD	Non	NO	High rates of PTSD is link to Low quality of life
Renner, Laireiter & Maier (2012)	Experiment-al	63 refugees & asylum seekers	Acculturation Stress, PTSD	Social support	NO	Social support in form of sponsorship is beneficial
Pourgourides (2006)	Descriptive	Non	PTSD	Social support	NO	Good training for social service provider
Keller et al., (2003)	Survey comparative	70 detained asylum seekers	PTSD	Non	NO	Detained asylum seekers present PTSD more than free asylum

Reference	Type of study	Participants	Type of stress	Coping facilitator	Quality of life	Outcome
Leaman & Gee (2011)	Experimental	131 Refugees (torture survivors)	PTSD	Religion	NO	Negative religious coping
Ellis et al., (2008)	Experimental	135 refugees	Acculturation & PTSD	Non	NO	Resettlement and acculturation stress
Kinzie et al., (2002)	Comparative	181 refugees	PTSD	Non	NO	Traumatic event can reactivate PTSD
Plante et al., (2002)	Experimental	135 refugees	Daily stress	Religion & family support	NO	Effective coping associated with good
Tang & Fox., (2001)	Survey	81 refugees	PTSD	Non	NO	High rate of PTSD
Silove (2000)	Descriptive	Asylum seekers	PTSD	Non	NO	Strengthening the intervention role of
Williams & Berry (1991)	Descriptive	Refugees	Acculturation stress	Social support	NO	Social support prevent acculturation
Iversen & Moken (2004)	Comparative	45 refugees & 53 asylum seekers	PTSD	Non	NO	High rate of PTSD in asylum seekers than
Toar et al., (2009)	Comparative	28 refugees , 60 asylum seekers	PTSD	Non	NO	High rate of PTSD in asylum seekers than
Ichikawa et al., (2006)	Comparative	18 detained & 37 non detained	PTSD	Non	NO	Detained asylum seekers present high

Reference	Type of study	Participants	Type of stress	Coping facilitator	Quality of life	Outcome
Steel et al., (2011)	Survey & longitudinal	104 Refugees	PTSD, Distress	Social activities	NO	Mental distress & difficult acculturation
Momartin et al., (2003)	Experimental	126 refugees	PTSD	Non	NO	Threat to life & traumatic loss strongly predict PTSD
Roth et al., (2006)	Survey & longitudinal	56 return refugees	Post-migration Stress, PTSD	Non	NO	High rate of PTSD among returnees
Hallas et al., (2007)	Comparative	4516 refugees	PTSD	Non	NO	Length of stay in asylum centre associated with PTSD.
Schubert & Punamäki, (2011)	Comparative	78 refugees	PTSD	Non	NO	Collective culture is associated with low rate of PTSD
Steel et al., (1999)	Comparative	62 asylum seekers, 30 refugees	PTSD, post-migration stress	Non	NO	Trauma, post-migration stress Link to PTSD
Sourender (2003)	Survey	10 asylum seekers family	PTSD, daily distress	Non	NO	Asylum procedures increase stress in traumatize refugees
Ghazinour et al., (2003)	Survey	100 refugees	PTSD	Social support	NO	Resilience link to cooperativeness and seeking of social support
Schiltz et al., (2007)	Survey	63 refugees & Asylum seekers	PTSD CPTSD, PTE	Social support	Yes	Negative quality of life, social Support as protective against depression.

Stress among refugees and asylum seekers

Out of the 29 studies that investigated stress, 15 of these studies focus merely on PTSD. Also, 9 treated PTSD in combination with other stress such as post-migration, daily and acculturation stress (e.g. Ellis, Macdonald, Lincoln, & Cabral, 2008). Only 5 studies investigated stress such as psychological distress and acculturation exclusively without PTSD (Strijk, Van Meijel, & Gamel, 2010; Roytburd & Friedlander, 2008). Some of these studies went further and compare the level of stress in free and detained asylum seekers (Ichikawa, Nakahara, & Wakai, 2006), others did the same for home returned refugees (Roth, Ekblad, & Agren, 2006) and for granted versus refuses asylums (Mueller, Schmidt, Staeheli, & Maier, 2010). Authors in most of their studies separated the asylum seekers group from the refugees group. Although there were no significant difference in the level of stress among the two groups, asylum seekers did present a high level of stress as compared to refugees (Iverson & Morken, 2004; Toar, Brien, & Fahey, 2009). Equally one study investigated Complex Posttraumatic Disorder with Dissociation (CPTSD) and Post-Traumatic Embitterment Disorder (PTED) (Schiltz, Houbre, & Martiny, 2007). Folkman (2010) recommended the study of psychological distress which is considered to an extend as ongoing stress. With this recommendation, authors will be able to treat stress and coping simultaneously. There is similar good evidence in this review showing that psychological distress such as post-migration stress contributes to PTSD severity (Steel, Silove, Bird, Mcgorry, & Mohan, 1999). With this in mind, research should look into psychological distress when attempting to draw up effective intervention approaches (Miller & Rasmussen, 2010).

In conclusion, there is a big difference on various approaches used by authors to study stress among refugees and asylum seekers. At the same time, there is evidence that psychological distress combine with other stress can yield fruits when it comes to proper intervention approaches. For a summary of studies on stress among refugees and asylum seekers see Figure 1.

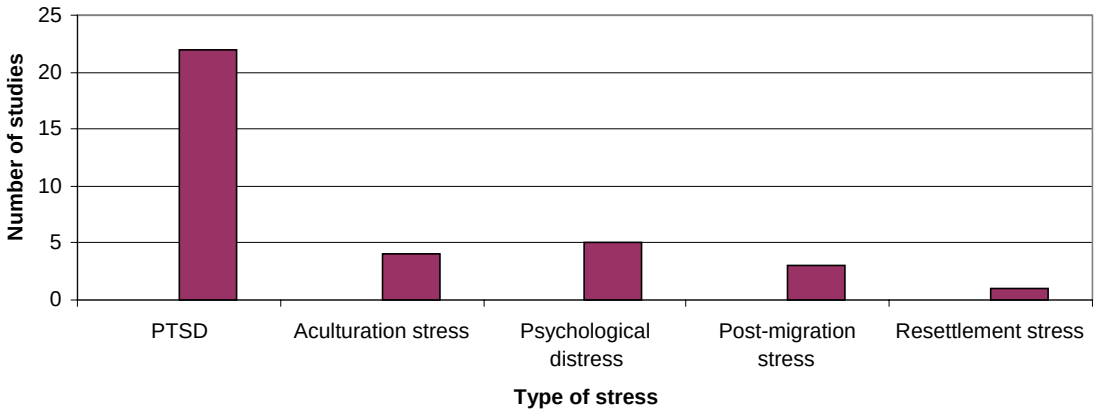

Figure 1. Summary of studies on the types of stress among refugees and asylum seekers

Coping with stress among refugees and asylum seekers

Most of the studies excluded coping. However 9 studies treated coping and stress simultaneously (e.g. Ghazinour, Richter, & Eisemann, 2003; Leaman & Gee, 2012). Coping here was handled by focusing on external coping facilitators such as social support. The social support in this case came from Family (Plante, Simicic, Anderson, & Manuel, 2002), friends and important persons in general (Gerritsen et al., 2006). Social support in one case was considered as social activities (Steel et al., 2011) and from another perspective as social acknowledgment (Maercker, Povilonyte, Lianova, & Pohlmann, 2009). Here the author set out to verify if publicly acknowledging PTSD can yield positive results, however it was concluded that social acknowledgement and PTSD produces a negative relationship. From another perspective, two studies considered religion as a form of coping (Leaman & Gee, 2012; Plante, Simicic, Anderson, & Manuel, 2002). These studies indicated that negative religious coping was associated with PTSD implying that refugees who turn towards religion as a way of coping reveal low rate of PTSD symptoms.

In summary, although most of the studies did consider the recommendations when dealing with coping, there were still limitations to the extend on which the coping resources are considered. For instance, the studies duals mostly on social support while

neglecting other facilitators such as multicultural and self-efficacy variables which are more internal and judged important for successful intervention approaches. For a summary of studies see Figure 2.

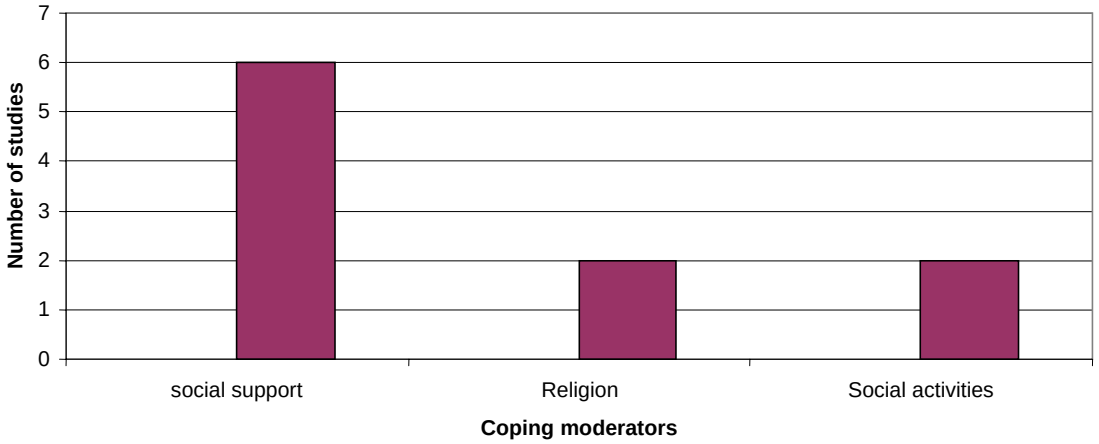

Figure 2. Summary of studies on coping resources.

Quality of life among refugees and asylum seekers

Although some studies did caution about the general wellbeing, only one study did consider quality of life among refugees and asylum seekers (Schiltz, Houbre & Martiny, 2007). In this study, asylum seekers and refugees obtained very low score on the quality of life scale. Given that there have been an increase in research on the quality of life in certain population, there is evidence that the refugees and asylum population is excluded. In summary, it will be advantageous to include the quality of life variable when researching with refugees and asylum seekers mental health. The summary of studies on stress, coping and quality of life among refugees and asylum seekers is shown in Figure 3.

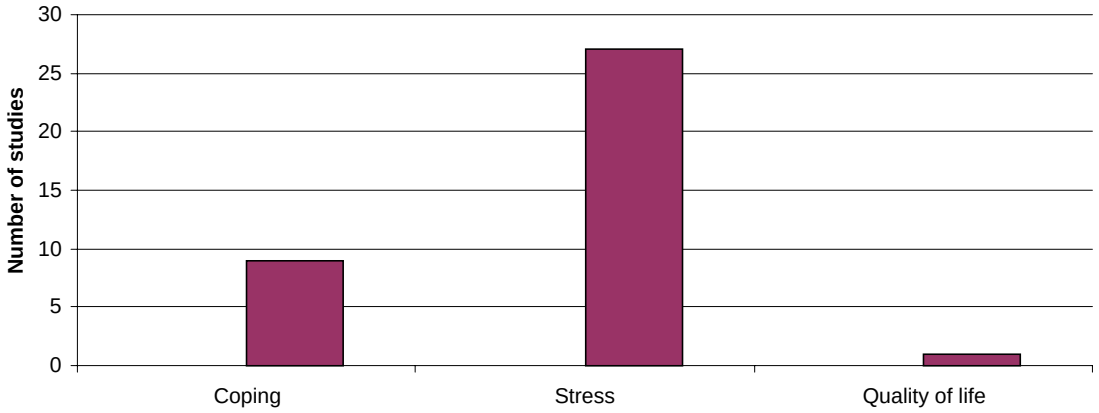

Figure 3. Summary of studies on stress, coping and quality of life among refugees and asylum seekers.

Discussion

Although the majority of studies in this review focus on stress, a few did investigate coping with social support as the main facilitator. At the same time, only one study was devoted to the quality of life among refugees and asylum seekers. Equally, most of the studies took a survey and comparative approach. Although, some of the studies were experimental in nature, only one involved a control group. Also two studies took longitudinal approach. Here, the findings become interesting. There might be some reasons to back up the scarcity of longitudinal studies that were found. Firstly, though the study proceeds as systematic as possible in the search of literature, the risk of missing key articles in any review paper is always present. Furthermore, longitudinal studies though recommended in most research that is aimed at providing intervention techniques are time consuming and may turn out to be expensive. Although these barriers exist, the recommendations for proper longitudinal studies should be taken serious among refugees and asylum seekers. This is partly because asylum seeking is a process characterized by various stressors implying that studies that accompany this vulnerable group through out the process can be more beneficial.

Although research shows that PTSD is frequent among refugees and asylum seekers as other psychological distress, many studies are mostly considering but PTSD. For instance, there was only one descriptive study that tries to bridge the gap between PTSD and psychological distress by showing how the two could increase the efficacy of intervention approaches if considered simultaneously. There is equally some evidence that psychological distress can help in maintaining or relapsing PTSD. For example, a few of these psychological distresses such as acculturation and post-migration were found to be a thread to the psychological wellbeing of refugees and asylum seekers. Moreover, the presence of PTSD and psychological distress are link to depression and anxiety accompanied by suicidal behaviors. Further research is needed to properly establish the correlation between PTSD and psychological distress. At the same time, studies should take into account the newly identify stress disorders such as CPTSD and PTED.

Although it has been recommended that stress and coping should be investigated simultaneously especially when conducting applied studies, there were few papers that followed this recommendation. In this perspective, the coping maybe investigated by sorting out various coping strategies and coping facilitators as well. With this, researchers will be able to detect adaptive and non adaptive coping strategies among refugees and asylum seekers. Furthermore, coping facilitators in the review papers were social support in nature implying that other existing facilitators such as self-efficacy and multicultural context were totally excluded despite the recommendations to include them in stress and coping research. In line with this poor consideration in the domain of coping, there is a need for further research that will shed more light on the issue.

Surprising enough, there was only one study that dealt with the quality of life, CPTSD and PTED among refugees and asylum seekers despite the existence of various psychological and physical difficulties that constantly characterized the life of this vulnerable population. With this in mind, there is a strong recommendation that calls for consideration of quality of life among this vulnerable population.

Conclusively, the approaches taken by researchers in dealing with stress and coping among refugees and asylum seekers are heterogeneous in nature. There appear to be no clear standard on the way stress and coping are handle in this population despite the

existence of some recommendations. Furthermore, there is lack of solid scientific backing when it comes to bridging the gap between various stress (PTSD, CPTSD, PTED) among refugees and asylum seekers. Equally, there should be proper research such as to stay in line with the evolution of stress and trauma concepts according to the Diagnostic and Statistical Manual for Mental Disorders (5th ed., *DSM-5*, American Psychiatric Association, 2013). At the same time, the quality of life of this population is given little attention. Further research that lay emphasis on the recommendations is needed in the study of stress, coping and quality of life among refugees and asylum seekers.

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Chapter 4

Post-Migration Stressors and Post-Traumatic Embitterment Disorder among Refugees and Asylum Seekers

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Abstract

The objectives of this study were to qualitatively sort out various stressors arising from administrative, social, financial and acculturation difficulties among refugees and asylum seekers as they struggle to settle in their host country. Also, assessing Post-Traumatic Embitterment Disorder (PTED) forms a major concern for the work at hand. While 33 asylum seekers participated in the interview, 102 completed the PTED screening instrument. The data collection took place in Luxembourg. Preliminary findings indicated that, administrative process install fear of repatriation while social isolation, loneliness, lack of friends and communication with families was link to social, financial and acculturation difficulties. The PTED instrument internal consistency value was good and accepted thus making it reliable for used among this population. While there were some significant differences at .01 levels among score check against gender and marital status, more than 80% of participants mean score was above the cut off point of ≥ 2.5. With the help of results from this study, an extended psychological model of stressors and PTED is set up and suggestions for future direction with psycho-social implications are discussed.

Keywords: Post-traumatic embitterment disorder, acculturation, financial, social and acculturation difficulties, refugees and asylum seekers

Introduction

For the past years, a plethora of papers have focused on Post-Traumatic Stress Disorder (PTSD) as the major cause of refugees and asylum seekers mental instability. Although the latter is true, post-migration related difficulties such as detention help in maintaining or re-lapsing PTSD (Steel, Bird, McGorry, & Mohan, 1999). Equally settlement, financial and acculturation difficulties have been link to PTSD among refugees and asylum seekers (Birman & Tran, 2008; Perera et al., 2013; Nickerson et al., 2014). Relatively recently, post-migration stress have made its debut as a major concern among refugees and asylum seekers. This is so because the refugees and asylum seekers are faced with difficulties ranging from social, acculturation, administrative and financial when they arrived in their host countries (Ichikawa, Nakahara, & Wakai, 2006; Silove, Steel, & Watters, 2000 Silove, Steel, Bauman, Chey, & McFarlane, 2007; Sinnerbrink, Silove, Field, Steel, & Manicavasagar, 1997). In line with this, further research has leads to the discovery of Post-Traumatic Embitterment Disorders (PTED) which clearly differentiate itself from other stress related disorders such as PTSD, anxiety and depression (Linden, Bauman, Rotte, & Schippan, 2007, 2008). PTED clearly falls under a type of maladjustment disorder arising from negative non threatening life events such as unemployment, divorce and feeling of injustice (Linden, Baumann, Lieberei, & Rotter, 2009). With this in mind, there is a need to add PTED in Diagnostic and Statistical Manual of Mental Disorders (5^{th} ed., *DMS-5*) (Belaise, Bernhaud, & Linden, 2012). With PTED, individuals feel injustice, embitterment and violent uncontrolled anger (Linden, et al., 2007). This maladjustment disorder is characterized by suicidal thoughts, feeling of helplessness, aggressive behaviors, public withdrawal and obtrusive thoughts (Hauer, Wessel, & Merckelbach, 2006). In light of this, the ongoing difficulties face by refugees and asylum seekers within their host countries calls for more attention since it is evident that these difficulties helps in eliciting and maintaining PTSD and PTED to an extend as well. Refugee and asylum population present a greater risk of PTED given their ongoing difficulties (Linden & Maercker, 2011). It is therefore in this light that the study at hand seeks to sort out various stressors that are common among refugees and asylum seekers

as they attempt to resettle in their host countries. Moreover, it is obvious that if one needs to start thinking of a good psychotherapy for PTED, one needs to start by thinking of various regrets in life that are at the same time stressful (Linden, et al., 2007).

Up to date, few studies have look to some sources of stress among refugees (Sulaiman-Hill & Thompson, 2012, 2012b). Here, the study indicated that past experience memories, family separation and resettlement challenges were major sources of ongoing stress among refugees once in the host country (Sulaiman-Hill & Thompson, 2012). Due to the scarcity of published works on various stressors face by refugees and asylum seekers together with PTED when they arrived their host countries, the study at hand seek to sort out: 1) financial, cultural, social and administrative stress encountered by refugees and asylum seekers and 2) evaluate PTED among refugees and asylum seekers and set up a psychological model that can benefit this group of individuals.

Method

Study design

The study make used of semi-structured interviews to identify various sources of stress among refugees and asylum seekers. At the same time, post-traumatic embitterment disorders questionnaires were equally administered. The mixed approach helps in starting up a link between psychological distress and ongoing post-traumatic embitterment disorders. Equally, the psychological needs of the refugees and asylum seekers are highlighted.

Participants

Participants were of various origins such as from Syria, Libya, Nigeria, Liberia, ex-Yugoslavia, Afghanistan and Egypt most of who have arrived Luxembourg between 2007 and 2013. The study aimed at recruiting a representative sample across these population groups. Since some participants were afraid that giving information may jeopardize their asylum process, it makes it difficult to reach the representative sample. With this in mind, the study aimed for indicative and not necessary representative sample (Colic-Peisker &

Tilbury, 2007). The first part that make used of semi-structured interviews got 33 participants. In the second phase, 102 participants completed the PTED questionnaires.

Interview Procedures

The study proceeded by making used of snowball sampling. Intensive and multiple contacts were made with participant across each representative group. With this, the inclusion of participants with different traumatic experiences was assured (Bloch, 2007). All the 33 participants took part in the individual face to face interview lasting from 2 to 3 hours. The first part of the interview involved semi-structural questionnaires translated both into English and French. The interviews that explored information about acculturation, administrative, financial and social difficulties were recorded and latter on transcribed. Where there were difficulties in understanding French or English, a translator was used. The Availability of translated materials and interpreters allow individuals with limited knowledge in French and English to participate. The transcribed interviews were analyzed with the help of WEFT QDA software. Furthermore, this software allows us to see code text in the original context, provide some statistics on the coded coverage, identify and record similarities and differences within codes.

Post-Traumatic Embitterment Disorder (PTED) questionnaire

Post-traumatic embitterment questionnaire were chosen first because there is an english version. Secondly its internal consistency and reliability are reported to be high and satisfactory though in a different population other than refugees and asylum seekers (Linden et al., 2009). The PTED instruments consist of 19 items with each item rated on the likert scale ranging from 0 (not true at all) to 4 (extremely true) with higher scores indicating the severity level of PTED. As a cut-off score, mean total scores $\geq$ 2.5 indicates clinically significant posttraumatic embitterment disorders (Linden et al., 2009).

Analysis

Responses to semi-structured questions were analyzed using WEFT QDA. There was an initial first stage of open coding where each recorded interviews were sub-categorized into various micro meanings. The last coding stage comprised the comparisons of the decontextualized codes in order to sort out links between the categories; similar categories were merged to produce the main thematic categories (Grbich, 1999).

We used SPSS 17 for windows in the analysis of data from PTED. The reliability of the instrument was established through the calculation of Cronbach's alpha. Given that, the scale may not have been administered among the refugee population, we seize the opportunity to further analyze the factorial structure of the scale. The frequencies were calculated for all items. Since we did not pursue the test for normality, the Mann-Whitney tests were employed in the analysis of the difference between scores on PTED. Socio-demographic variables such as gender and marital status were computed against the scores to sort out the differences.

Results

The participants were between 28 to 50 years (mean age 39.1 years). All were asylums seekers that have lived in Luxembourg for a minimum of 3 years. Of the 50 individuals contacted and eligible to participate in the interview, 33 (66%) participated. While 16 participants already got married, 14 were still single while 3 have divorce. At the same time, 20 have been living in Luxembourg for a period of 5 years while 13 for 3 years. Socio-demographic details are presented in Table 1. Concerning the PTED questionnaire, participants were between 25 to 54 years (mean age 40 years). Their years of living in Luxembourg range from 2 to 6 years. 151 asylum seekers were contacted, for which 134 accepted to fill the questionnaire. At the end 113 did return their filled questionnaires. Only 102 questionnaires were correctly completed thus 11 were discarded from the analysis. 50 participants reported to be married while 41 were single and 11 divorce at the time of which the questionnaires were filled. Table 1 shows the socio-demographic characteristics of participants.

Table 1

Socio-demographic characteristics of participants

		Interview *N* = 33	PTED *N* = 102	Female Int/PTED		Male Int/PTED	
Country of origin *n*	Liberia	2	4	0	1	2	3
	Afghanistan	7	8	3	3	4	5
	Nigeria	3	20	0	6	3	14
	Libya	5	4	1	2	4	2
	Kosovo	13	15	8	6	5	9
	Syria	0	20	0	8	0	12
	Sudan	2	5	0	1	2	4
	Iraq	1	16	1	3	0	13
	Tunisia	0	10	0	2	0	8
Age in years (*SD*)	Mean (*SD*)	39.1 (5)	40 (6)				
	Minimum	28	25				
	Maximum	50	54				
Marital status	Single	14	50				
	Married	16	41				
	Divorce	3	11				
Length of stay in Luxembourg (years)	Mean	5	4				
	Minimum	1	2				
	Maximum	5	6				

Int = Interview

Sources of stress

Participants discussed lengthily about their cultural, social and economic situation in Luxembourg. Equally, the administrative conditions concerning their request for protection were also discussed. Here we aimed at qualitatively identifying the sources of ongoing stress they are encountering in Luxembourg. Reponses were group into four themes (Table 2), these themes were already created for example, acculturation theme contains 6 items with an example such as "*How do you describe yourself? a Person from the original country or Luxembourgish or both?*" Example of responses from this item ""*I think I am part of this country now……..*" E7 "*Is difficult to say, but I have not changed yet……*" E8 "*Country of origin*" E 9 "*With time I will be part of here……*" E10 "*for sure if I am granted state permit I will be here……*" E11 "*I see myself as Luxembourgish and at the same time Iraq……..*" "The second theme is the

Administrative theme with one item "*How do you think the Luxembourg administration is helping or not helping you"* Example of responses from this item *"E3 "…I have been here for more than 4 years now but no papers.……" E4 "…..the waiting time for permit results is very long….." E5 « they provide us where to stay…which is not in good condition… » E6 « ……I think they are slow …..and one can be sent out from Luxembourg.…."* The third theme consist of financial situation with one item"*How are you satisfy or dissatisfy with your financial situation in Luxembourg"*. Example of responses from this item *"E2 "…...i don't even work …." E3 "….no right to work so I am very poor…." E4 "…we just get little money….." E5 « ….my financial situation is bad » E6 « …i just have little to eat and nothing more… » E7 "…..what they give us is not enough….." E8 "….my financial situation is very bad.…."* The social theme consist of five items for example "*How is your family helping you at this present moment "* Example of responses from this item *"E1 « …for so long i have not been talking with them.…. » E2 "…is difficult because my family is very poor.…" E3 "….yeah at times we just talk…" E4 "…..what can my family do…." E5 "lost contact with my family since.……" E6 "……I am not in communication with my family…" E7 "…no money to talk with them…"*.These themes are further illustrated in Table 2.

Table 2

Sources of stress among refugees and asylum seekers

Theme	Features	Illustrative quotes
Acculturation	Change, Integration, Learning, Time,	*E7 "Is difficult to say, but I have not changed yet……." E13 "I already feel integrated" E5 "I have learned the ways of people here …….. "*
	Openness, Loneliness, Friends	*E3 "I am mostly in the house here……." E4 "There is a big difference as here people are not open" E7"I fine it difficult making friends……." E8*
Administration	Time, Fear of repatriation,	*E4 ".....the waiting time for permit results is very long....." E6 "……I think they are slow .....and one can be sent out from Luxembourg……"*
Financial situation	No right to work	*E12 "….is difficult to have enough money as we don't work……" E11 " …my financial situation is bad, no income…."*
Social situation	Communication, No income,	*E2 "…is difficult because my family is very poor……" E5 "lost contact with my family since……..."*

Results were further analyzed base on gender, length of stay and marital status of participants. Women show the tendency of social isolation as compared to males, for example *"E10 ……..……..…and I feel lonely at times.…..…" E7"I fine it difficult making friends.…..…."* For the length of stay, they was a tendency of more stress among people who have been in Luxembourg for long without having an answer concerning their case, for example *"E6 «……I think they are slow …..and one can be sent out from Luxembourg.…..…" E19 "…..is depressive for I have been waiting now for 5 years to get my papers…"* Unmarried and divorce participants express more social frustrations than their counterparts *"E17 "my friend, my family just pray for me…." E21 "…….…..a lots of time I feel alone"*. With acculturation difficulties, financial, social and administrative participants have expressed the tendency of being under stress.

Post-Traumatic Embitterment Disorders (PTED)

In other to assess the reliability of PTED instrument against the refugee population, the internal consistency was taken into consideration. Equally, a test-retest approach was also

carried out. The Cronbach's alpha of .90 indicated a good and high internal consistency. With a spearman correlation value of .73 for the total score, and individual item correlation scores ranging from .50 to .89, there was good test-retest reliability for PTED. We went further to examine factorial structure of PTED instrument. Base on the scree plot method by Catell (1966), two factors were extracted that explained 57.13% of the total Variance. With rotation using the Varimax technique, a more simplify structure emerges. Factor I included all items seeking information on psychological status and social functioning. Factor II is defined by items which focus on emotional response to traumatizing events and some thoughts of revenge. The two factors therefore together form the PTED diagnostic instrument. In summary, Linden et al., (2007) called these two factors as: pathological emotional reaction with impairment of mental state and social functioning, all these after an undesirable life event. With internal consistency and factorial structure established, the PTED scale can be a suitable instrument to be used among refugee and asylum seekers population. Details results are shown in Table 3.

Table 3

Reliability and factorial structure of PTED

Psycho-social functioning (Alpha = .89)	SD	Factor 1	Factor 2
2. That lead to a noticeable and persistent negative change in my mental well-being	.95	.70	
4. About which I have to think over and over again	1.03	.55	
5. That causes me to be extremely upset when I am reminded of it	.92	.60	
8. That led to the feeling that there is no sense to strive or to make an effort	.93	.55	
9. That makes me to frequently feel sullen and unhappy	1.09	.77	
10. That impaired my overall physical well being	1.03	.82	
11. That causes me to avoid certain places or persons so as to not be reminded of them	1.00	.55	
12. That makes me feel helpless and disempowered	1.20	.60	
14. That lead to a considerable decrease in my strength and drive	.99	.80	
15. That made that I am more easily irritated than before	1.04	.73	
16. That makes that I must distract myself in order to experience a normal mood	.89	.82	
17. That made me unable to pursue occupational and/or family activities as before	1.01	.85	
18. That caused me to draw back from friends and social activities	1.22	.70	
19. Which frequently evokes painful memories	.99	.56	
Emotional response/revenge thoughts (Alpha = .79)			
1. That hurt my feelings and caused considerable embitterment	.95		.64
3. That I see as very unjust and unfair	1.07		.79
6. That triggers me to harbor thoughts of revenge	1.04		.61
7. For which I blame and am angry with myself	.83		.73
13. That triggers feelings of satisfaction when I think that the responsible party having to experience a similar situation	.97		52
Total Alpha = .90			

Table 4 shows the general scores of asylum seekers as measured by PTED. There were significant differences between some of the scores as check against gender and marital

status. As compare to males, females were more victims of their feelings been hurt by a negative event (item 1), both females and males significantly avoided places that remind them of the past negative event (item 11). Equally, females participants significantly isolate themselves from friends and social activities as compared to their males counterparts as a result of negative events associated to these people or places (item 18). Both genders significantly get upset when reminded of the negative event (item 5). From another dimension, marital status was check across each item. Married asylum seekers significantly indicated their difficulties in pursuing occupational and family activities (item 17). Also, married individuals were victims of thoughts of their negative past events than their counterparts (item 4). On the other hand, single participants significantly suffer from social isolation as compare to their counterparts (item 11). Unmarried participants equally express mood difficulties as compared to their counterparts (item 16).

Table 4

Assessment of gender and marital status against PTED scores

	Female *n* = 32	Male *n* = 70	Single *n* = 50	Married *n* = 41
	Mean	Mean	Mean	Mean
2. That lead to a noticeable and persistent negative change in my mental well-being	3.2	3.8	3.1	3.0
4. About which I have to think over and over again	3.4	3.1	2.9	3.2*
5. That causes me to be extremely upset when I am reminded of it	3.6*	3.2*	3.0	1.8
8. That led to the feeling that there is no sense to strive or to make an effort	2.1	1.4	1.2	1.1
9. That makes me to frequently feel sullen and unhappy	3.3	2.8	2.9	1.8
10. That impaired my overall physical well being	2.7	1.8	1.5	1.3
11. That causes me to avoid certain places or persons so as to not be reminded of them	3.7*	3.1*	3.2*	1.1*
12. That makes me feel helpless and disempowered	2.1	2.0	2.9	2.3
14. That lead to a considerable decrease in my strength and drive	1.6	1.8	2.9	1.5
15. That made that I am more easily irritated than before	2.9	1.8	1.3	2.8
16. That makes that I must distract myself in order to experience a normal mood	2.8	1.8	3.0*	2.9
17. That made me unable to pursue occupational and/or family activities as before	3.0	2.8	1.8	3.5*
18. That caused me to draw back from friends and social activities	3.8*	1.8	1.1	1.5
19. Which frequently evokes painful memories	.3.5	3.8	3.5	3.2
1. That hurt my feelings and caused considerable embitterment	3.2*	2.9	3.0	2.9
3. That I see as very unjust and unfair	3.8	3.5	3.4	3.2
6. That triggers me to harbor thoughts of revenge	3.0	2.8	2.9	1.3
7. For which I blame and am angry with myself	1.8	1.3	1.2	1.1
13. That triggers feelings of satisfaction when I think that the responsible party having to experience a similar situation	2.8	1.5	1.7	2.1

*Significant difference between single/married, Females/ Males participants at $p \leq .01$

Discussion

The findings from this study indicate that refugees and asylum seekers are victims of stressful life events in their host country. Firstly, the long asylum waiting periods proof to be frustrating and stressful to this vulnerable population. Moreover, it installs fear of being expelled in case of a negative response from the administration. Hardship is one of the problem faces by asylum seekers, with no right to work, they are face with financial stress. Moreover, despite the tendency of a good acculturation process, there were signs of despair as they are face with different cultural environmental hassles. The behavioral pattern of the people from the host country seems to differ and thus contribute to acculturation stress. Given that, social support from the family maybe of great assistance, asylum seekers suffers from family isolation partly because of lack of communication means. The lack of legal status has proven to be problematic for asylum seekers. The fear of repatriation has been evident in this study. Asylum seekers spend their time meditating on their legal status and are always occupied with the burden of fear of repatriation to their country of origin where they may subsequently face persecution (Steel & Silove, 2004). Furthermore, findings from this qualitative study have also been evident in similar studies. For example, refugees and asylum seekers were found to be victims of stress directly related to the separation from families and resettlement challenges (Sulaiman-Hill & Thompson, 2012). Referring to gender, it was evidence that women are face with more resettlement stressors than men especially at the social level. Women are victims of social isolation and depression feelings. In recent related studies, women were found to be victims of more resettlement stressors than their counterparts (Perera et al., 2013). Similarly, communication and unemployment was evident in this finding as one of the major stressors. Related findings have been reported with refugees and asylum seekers showing weak social network and social integration (Teodorescu, Heir, Wentzel-Larsen, & Lien, 2012). The finding from the qualitative section of the work goes in line with literature from Maercker and Horn (2012). In their study, they show how the environment and interpersonal process maybe functioning at the detriment of ones health. Equally, it has been shown that refugees with unemployment and environmental stressors are

victims of poor health in general and psychosomatic disorders in particular (Jamil et al., 2010).

The post-traumatic embitterment disorder self rating scale has proven to be reliable and consistence for used among refugees and asylum seekers. Furthermore, the instrument factorial structure indentified two components: Psycho-social functioning and emotional response/revenge thoughts. Although it can be used as a screening instrument in the assessment of psycho-social functioning and emotional response thoughts as results of negative events, some items needs to be given more attention since gender and marital status were significantly interacting with them. This is so because females obtain significant high score for some items (Item 1, Item 18, Item 11, and Item 5) and males on Item 11 and 5. On the other hand, marital status did have some significant effects on some items. For example single participants significantly scored high on item 11 and 16 while married participants on item 17 and 4. One reason here maybe that being in a family despite the stressful circumstances could be acting as a form of social support thus creating a better social environment among married refugees and asylum seekers hence fighting against social isolation (Item 11). Although the validity of PTED scale has not been reported among refugees and asylum seekers, it has been reported in other populations with negative life events. The psycho-social functioning and emotional response were found to show good discriminate values in patients and individuals with negative life events (Linden et al., 2009). In patients with depressive symptoms, the Korean version of PTED scale was found to be valid and reliable for used among Korean adults (Shine et al., 2012). Although the call (Belaise, Bernhaud, & Linden, 2012) for the inclusion of PTED into the Diagnostic and Statistic Manual of Mental disorders (5^{th} ed., *DSM-5*, American Psychiatric Association, 2013) have been felt with deaf ears, there continued to be evidence that this disorder differentiate itself from PTSD, anxiety and depression. Adding more points to the call, PTED maybe better understood if it is classified as a sub-type disorder (Dobricki & Maercker, 2010). There is no treatment to PTED reported among refugees and asylum seekers. However cognitive behavioral therapy with wisdom psychology approach has been the only treatment method tested among patients with PTED. There was evidence in the reduction of PTED symptoms with the used of wisdom psychology as a treatment method (Linden, Baumann, Lieberei,

Lorenz, & Rotter, 2011). This approach may also be adapted and used among refugees and asylum seekers for the treatment of PTED.

Study implications

The results from this study support the call for proper psycho-social treatment of post migration stressors among refugees and asylum seekers. Demographic variables such as gender and marital statues have their own part to play in the successful implementation of treatment approaches. First female refugees and asylum seekers react differently from males when it comes to coping with these stressors. In similar studies, it has been shown that despite a long stay in the host country, refugees are still victims of stressors originating from discrimination and unemployment (Sulaiman-Hill & Thompson, 2012b). The study further indicated that gender and unemployment status were playing a significant role in determining various stressors. Protective resources approach can be used against post-migration stressors. This approach is made up of, community talk, improving family communication, religious faith and peer network. With this approach in place, post migration stress originating from acculturation, financial, administrative and social problems can be reduced (Betancourt et al., 2014). Treatment of these post migration stressors does not only improve the general wellbeing of refugees but it also directly reduced the tendency and relapse of PTSD. This is so because post migration stressors help in aggravating, relapsing and maintaining PTSD (Birman & Tran, 2008; Nickerson et al., 2014; Perera et al., 2013; Rasmussen & Annan, 2010). As PTED was evidence in this study, it is also clear that gender and marital status determine PTED symptoms to an extend. In light of this, treatment approaches should take into consideration these two demographic variables. Although only one treatment approach Cognitive Behavioral Therapy (CBT) have been proposed for the treatment of PTED in a population with negative life event (Linden, et al., 2011), the study at hand recommend treatments approaches in the form of social support. In refugees and asylum seekers population, we assumed that their social, financial, resettlement problems are regarded as negative events, thus worthy of provoking PTED. Here social support in the form of advice, training skills to bypass various stressors can be beneficial. This will assured smooth adaptation and acculturation to their new environment. Given the existence of

stressors in the host country, the study attempted an extension of a model consisting of PTSD. In the extended model, PTED has been added as a causal variable resulting from post-migration stressors as well. The structure is shown in Figure 1.

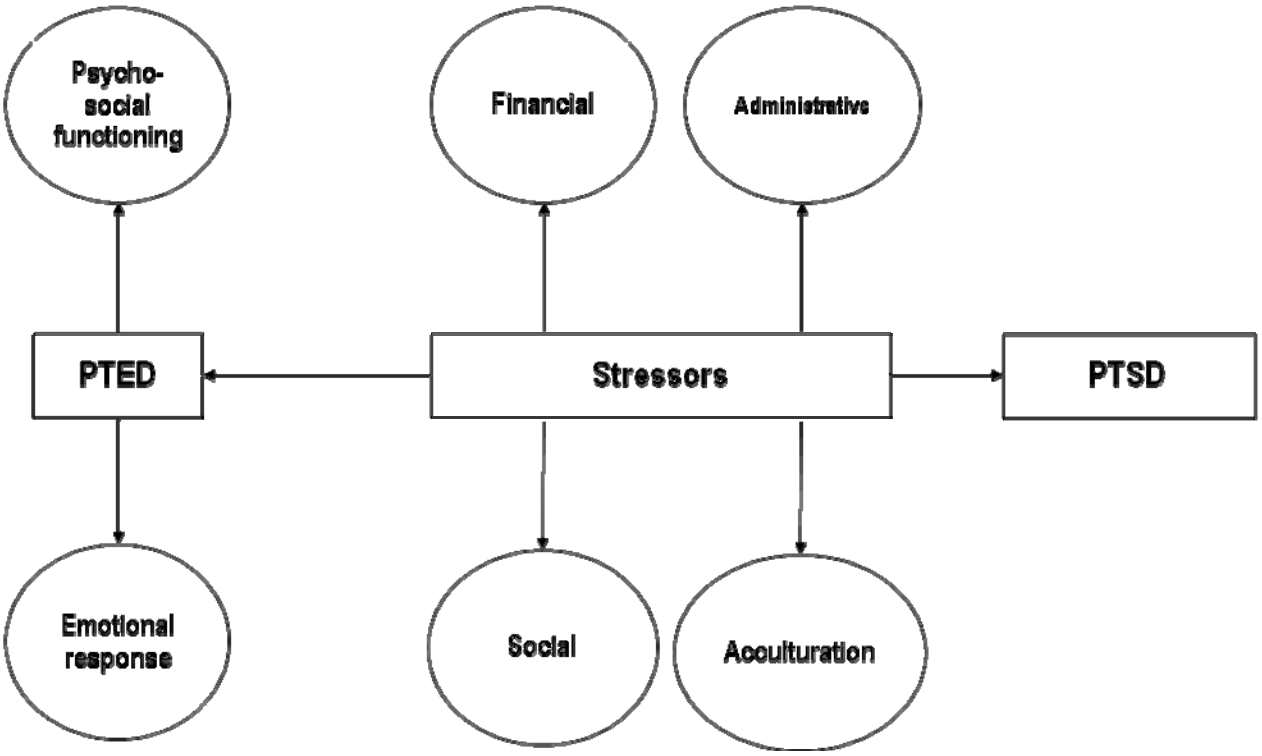

Figure 1. Psychological model of stressors, PTSD and PTED.

Figure 1 shows an extended model base on findings from this studies and other relevant literature (Janof-Bulman, 1992; Maercker & Horn, 2012). Stressors from the host country have an eliciting effect on PTED since they are considered to be unfair and thus violate functional thoughts (Beck, Rush, Shaw & Emery, 1979). Since these schemas are over-valued, disrupting them quickly leads to unstable psycho-social functioning and negative emotional response. In future, this model could be verified through structural equations modeling approach. A proper assessment of the extended model will help in the proper adaptation of social support and CBT.

Limitations and Future directions

There exist a number of limitations to this study. First the used of semi-structured interview may have lead to lost of important information. In future research, this aspect needs to be considered. Open interview may help in bringing in more information. Equally, the used of questionnaire may have lead to collection of robust data since the responses are more subjective. Future studies may involve longitudinal approach such as to reduce and verify the robustness of the data. As the studies were perform in one country setting (Luxembourg) there may not be the generalization of results in another setting, although we believe on the transferability of the findings. From another perspective, there was no control group that could help us compare PTED score among asylum seekers and the ordinary population. An experimental approach is therefore recommended in future study. Furthermore, our dimension reduction through factorial analysis with a small sample size may have ended up providing us with faulty results in parts. At N = 102 factorial analysis became just fair (Comrey & Lee, 1992). This is so because factor analysis stability and minimization of measurement error is assured as N increases. Although this is a generally accepted conception, studies have found this role of thumb unfounded since sample size did not affect the trustworthiness of factorial analysis (Maccallum, Widaman, Zhang, & Hong, 1999; Maccallum, Widaman, Zhang, Preacher, & Hong, 2000). Even with this unfounded result, our fair sample size may have reduced the factor analysis stability. Implying that future study should make used of a large sample size, such as to minimize sampling error and factorial instability.

The result seems to support our views that refugees and asylum seekers are victim of stressors and PTED. More than 80% of participants scored above the cut off total mean score ($\geq$ 2.5) implying that the mental health of this vulnerable group should be considered with high urgency. As in other studies, the 19 items PTED instrument could be a reliable starting point when screening for PTED among refugees and asylum seekers. Therefore it's used in mental health setting is highly recommended. Acculturation, social, financial and administrative difficulties appears to form the major stressors among refugees and asylum seekers as they struggle to settle in their host country.

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Part 2

Assessing the Effect of Social Support, Self-Efficacy, Multicultural Attitude, Quality of Life and Coping with Psychological Stress

Part 2 of this work consists of Chapter 5, 6 and 7. The study in chapter 5 assesses the effect of social support, multicultural attitude and self-efficacy on coping with psychological stress among refugees and asylum seekers. In Chapter 6, we evaluate a model consisting of social support as the mediator between self-efficacy and multicultural attitude. Chapter 7 focuses on the predicting power of social support and coping on quality of life.

Chapter 5

Social Support, Self-Efficacy and Multicultural Attitude on Coping with Stress among Refugees and Asylum Seekers: A Structural Equation Modeling Approach

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Article

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Abstract

This study evaluated a psychological model consisting of social support, self efficacy and multicultural attitude acting as predicting variables on adaptive coping. At N = 221, asylum seekers in Luxembourg completed the Multidimensional Scale of Perceived Social Support (MSPSS*)*, Coping Self-Efficacy Scale (CSES), Monroe Multicultural Attitude Scale Questionnaire (MASQUE) and Ways of Coping Questionnaire (WCQ). With the help of structural equation modeling, social support (friends, family, significant others) predicted significantly multicultural attitude (act, know, care). At the same time, social support predicted an increase in self-efficacy. Furthermore, self-efficacy, social support and multicultural attitude significantly predicted adaptive coping (accepting responsibilities, planful problem solving, positive reappraisal, seeking social support). Even if there are positive and significant causal relationships, the tested model fails to fit well to the data. The results from this study indicated that, the causal relationships that exist between the psychological dimensions can go a long way in helping health practitioners who are concern with the psycho-social needs of refugees and asylum seekers. Finally, findings are discussed by making reference to the psycho-social needs of refugees and asylum seekers. Suggestions are made to clinical and health practitioners working with this vulnerable population.

Keywords: Refugees, asylum seekers, social support, coping, multicultural attitude, Self-efficacy

Introduction

Since the conceptualization of social support by G. I. Sarason, Levine, Bashma, and R. B. Sarason (1983) many studies have sought to know how it affects stress in vulnerable population. For example the provision of social support reduces PTSD together with post-migration stress (Gerritsen et al., 2006). In another studies, social support has been found to act as a buffer against acculturation stress (Berry & Williams, 1991; Renner, Laireiter, & Maier, 2012). Moreover social support enhances resilience base practice that results in good health among refugees and asylum seekers (Ghazinour, Richter, & Eisemann, 2003). While these studies support the role play by social support on coping with stress among refugees and asylum seekers, some researchers have reported the role of self-efficacy on coping with stress. In a student population, self-efficacy was found to be playing a leading role in stress appraisal process, thus mediating between cognitive structures and the stress outcome (Karademas & Kalandzi-Azizi, 2004). Still in student's population, self-efficacy has been shown to have a negative correlation with the level of stress (Lyrakos, 2012). Although Benight and Bandura (2004) highlighted the importance of self-efficacy among people with diverse types of trauma, there exist no up to date studies that has investigated the role of self-efficacy on coping with stress among refugees and asylum seekers. There is therefore a need for such studies to be conducted (Pahud, Kirk, Gage, & Hornblow, 2009). From another perspective many authors have call for the inclusion of multicultural attitude in the study of stress and coping. For example, literature from P. T. Wong and J. C. Wong (2005) highlighted the multicultural perspective on coping with stress. In accordance with this, the multicultural attitude of refugees is an essential ingredient when it came to coping with stress (Slavin, Rainer, McCreary & Gowda, 1991). To the best of our knowledge, no studies have been carried out with multicultural attitude at the center of interest among refugees and asylum seekers. Also most studies focus on social support or self-efficacy alone (Dana, 2000a). At the same time, we have found no studies in which social support, self-efficacy and multicultural attitude are simultaneously predicting coping with stress among refugees and asylum seekers. The aims of this study were to assess 1) the predicting effects of

social support, self-efficacy and multicultural attitude on coping with stress 2) the fit of the social support, self-efficacy, multicultural attitude and coping with stress model.

Method

Setting

Once every week refugees and asylum seekers has the opportunity to encounter the researcher and answer the questionnaire. This encounter took place at various refugees' centers in Luxembourg between 2011 and 2014. The centers are own and operated by Caritas and Red Cross Luxembourg.

Red Cross Luxembourg

The Red Cross in Luxembourg through its migration and refugee department operates three houses that welcome, oriented and provide psycho-social support to migrants seeking international protection in Luxembourg. The Don Bosco reception centre act as the first reception house for migrants that have introduced their international protection application at the ministry of foreign affairs. At the same time, the centre plays the role of an emergency house for migrants seeking international protection but has not yet located the refugee department at the ministry of external affairs. The centre has the capacity of $N = 150$. The Red Cross migration and refugee department is equally in position of Félix chomé foundation house with a capacity of about $N = 60$. Here, priority is given to person with special needs (social, psychological, physical, educational etc) reason for which there is the presence of a permanent psychologist. In this centre, the team constantly organised educational, cultural and leisure activities for residents. Furthermore, there is equally Félix Schroeder centre with a capacity of $N = 50$. Here only single women with young children are admitted. At the same time, residents participate in different social, educational and cultural activities organised by the team of educators working in the centre.

Caritas Luxembourg

Caritas operate a centre which helps in orientating asylum seekers in Luxembourg through the presence of a sociologist. Equally in this centre, Muslim asylum seekers meet every Friday to practice their prayers. The centre also has a small capacity of hosting 10 to 15 people. Also, Caritas is in position of Saint Anthony's house with a capacity of N = 88. Here individuals and families seeking asylum are been housed and help by a divers group of educators. Help here is focus on health issues, procedures for seeking asylum, social, study and leisure activities. At the same time, foyer Ulysses under Caritas equally acts as a centre for asylum seekers. Here they can take a free bath, tea and some food.

Sample

Demographic information was gathered from Red Cross and Caritas refugees centre in Luxembourg. Approximately 1500 asylum seekers were contacted between the period of 2011 and 2013. After the first contact, 900 asylum seekers gave their feedback. 56% wish to participate, 11% refused, 16% refused by raising concerns over the confidentiality of the study despite our reassurance and 16% refused base on time constraint. A total of 420 asylum seekers participated through out the data collection process. Base on age, gender, country of origin and time spend in Luxembourg, the sample was statistically represented (Table 1). The asylum seekers came from 20 different countries, 40% Montenegro, 12% Bosnia-Herzegovina, 10% Albania and 8% Algeria. More than 60% of the sample has lived in Luxembourg for a period of 12 months and above. The questionnaires were administered directly by the researcher at each centre or handed to the participant to be return on a latter date. Of the 420 questionnaires handed to the participants, 350 were return. Of the 350 return questionnaires, 69% were properly completed while 31% were partially completed thus discarded from the analysis.

Table 1

Summary of socio-demographic characteristics of participants

		Total (*N* = 221)		Female (*n* = 79)		Male (*n* = 142	
Country of origin *n* (%)	Montenegro	61	(28)	25		36	
	Bosnia-H	50	(23)	21		29	
	Albania	31	(14)	12		19	
	Algeria	15	(7)	2		13	
	Afghanistan	9	(4)	2		7	
	Syria	7	(3)	0		7	
	Nigeria	7	(3)	2		5	
	others	41	(19)	15		26	
Age in years	Mean (*SD*)	37	(4)	33	(7)	42	(9)
	Maximum	57		50		57	
	Minimum	19		19		21	
Marital status *n*	Single	141		17		124	
	Married	60		49		11	
	Divorce	20		13		7	
Family size	Mean (*SD*)	7	(3)	6	(2)	6.6	(2.7)
	Maximum	8		7		8	
	Minimum	1		2		1	
Length of stay in	Mean (*SD*)	5	(2)	2	(1.8)	3	(1.5)
Luxembourg (years/months)	Maximum	10	months	5		10	
	Minimum	6	months	6	months	8	months
Time waiting for	Mean (*SD*)	5	(1.5)	3	(1.3)	4	(1.4)
asylum response in years	Maximum	10		6		10	
	Minimum	2		3		2.5	

Measures

The *Multidimensional Scale of Perceived Social Support (MSPSS)* (Zimet, Dahlem, Zimet, & Farley, 1988) consists of 12 items on the likert scale. The scale ranges from 1 (strongly disagree) to 7 (very strongly agree). For the work at hand, we limit ourselves to 6 (strongly agree). This limitation is in line with other study where there was no effect on the scale limitation. Indeed reliability is maintained between a 4 and 6 point likert scale. Increasing the scale beyond 6 point does not necessary affect reliability (Chang, 1994). Furthermore, these items falls in one of the following dimensions: support by friends (FR) (e.g. *I can talk about my problem with my friends*), support by family (FA) (e.g. *my*

family is willing to help me make decisions), support from significant others (SO) (e.g. *there is a special person who is around when I am in need*). Through internal consistency and factorial validity, the MSPSS has been shown to have good psychometric properties (Canty-Mitchell & Zimet, 2000). For instance, the scale has been validated in a traumatized sample in Thailand with a total score $\alpha = .87$. For each sub-scale, $\alpha = .84$, .85 and .74 were obtained for FR, FA and SO respectively (Mongpakara, Ruktraku, & Mongpakara, 2011)

The *Coping Self-Efficacy Scale (CSES)* (Chesney, Neilands, Chambers, Taylor, & Folkman, 2006) consists of 26 items on a scale ranging from 0 (cannot do at all) to 10 (certain can do). Further analysis has filtered 13 items that belongs to problem focus coping (6 items), stop unpleasant emotions (4 items) and thoughts and getting support from family and friends (3 items) dimensions. Through internal consistency and factorial analysis, the 13 items have proven good psychometric properties. In an HIV seropositve sample suffering from depression, alpha values of .91, .91 and .80 for problem focus, emotional thoughts, and friends/family support were obtained respectively (Chesney et al., 2006).

The *Munroe Multicultural Attitude Scale Questionnaire (MASQUE)* (Munroe, 2003; Munroe & Pearson 2006). This was first developed as a 28 items then latter on reduced to 18 items rated on a likert scale which ranges from 1 (strongly disagree) to 6 (strongly agree).The items belong to one of the following dimensions, Know (e.g. *I understand religious belief may differ*), care (e.g. *I care about respecting divers cultural values*) act (e.g. *I act the same with each an everyone regardless of his or her economic status*). Although we administered the 28 items, it was latter on reduced to 18 through factorial analysis thus corresponding to Munroe and Pearson (2006) new version. In a student population sample, alpha values of .70, .70 and .58 were obtained for know, care, act subscales respectively. A total scale alpha was .80. (Munroe & Pearson, 2006).

The *Ways of Coping Questionnaire* (WCQ) (Folkman & Lazarus, 1988) consist of 66 items rated from 1 (Not used) to 4 (Used a great deal). These items are classified into 7 dimension which include, confrontive coping (e.g. *let my feeling out somehow*), Distancing (e.g. *went on as if nothing bad happen*), Self-controlling (e.g. *I try to keep my feelings to myself*), seeking-social support (e.g. *I got professional help*), Accepting responsibilities (e.g.*critisized or lecture myself*), escape-avoidance (e.g. *hope a miracle will happen*), planful problem solving (e.g. *made a plan of action and follow*), positive reappraisal (e.g. *found new faith*). The psychometric properties of this scale have been reported (Durak, Senol-Durak, & Elagöz, 2011). Although, the reliability of each scale keep on producing only acceptable scores (Nunally, 1978), they are still used and accepted in the clinical field. For instance, in an Iranian population, alpha values were .78, .79, .76 and .72 for seeking social support, planful problem solving, positive reappraisal and accepting responsibilities respectively (Padyab, 2009). Only these four dimensions corresponding to effective ways of coping are included in our analysis. Seeking social support, planful problem solving, positive reappraisal and accepting responsibilities are more likely to associate with a good mental health (Folkman & Moskowitz, 2004). In light of this, we will focus on these four sub-scales for the work at hand.

Most of the questionnaires were answered at the various refugees centers described before. Although a small portion (approximately 20%) of it was done outside the centers by asylum seekers that do not frequent the centers. In many cases, we encountered the asylum seekers in groups. All participants were assured about the anonymity of the research and thus their information was well protected base on data and information rules and regulations. Participation was on voluntary basis.

Data analysis

The study make used of descriptive statistics in giving details of socio-demographic characteristics of participants. We use multidimensional approach in calculating the factorial analysis base on component analysis. With this, we were able to verify the factorial validity (Kiers, 1990). The internal consistency of each sub-scale was

determined with the help of Cronbach's alpha. Base on structural equations modeling, the presumed model was verify (Kline, 2010). Analyses were done with SPSS 17 and Mplus 5.

Validating the Measures

Factorial Validity of the Multidimensional Scale of Perceived Social Support (MSPSS)

Base on factorial analysis, component and varimax rotation approach, a simplify structure of MSPSS was obtained. With this approach, three dimensions were confirmed (support from friends, family members and significant others) with 48.4% of total variance explained. In the support from friend's dimension, all items loaded with a minimum variance of 55% and maximum of 63%. From the part of family members support, a minimum of 53% and maximum of 71% was recorded for item loading. For the support of significance people, items loaded with 52% minimum and 68% maximum of variance. Details results are presented in Table 2.

Internal consistency

The internal consistency (Cronbach alpha) for MSPSS was good and acceptable for all the three subscales. An alpha value of .70 was obtained for support from friends, .72 for support from family members and .71 for support from significant others. The alpha value for the whole instrument stood at .79 thus making it reliable for data collection. The results for total and subscale alpha can be found in Table 2.

Factorial validity of the Coping Self-Efficacy Scale (CSES)

After performing component analysis (Varimax rotation) the following results were obtained. Three dimensions were obtained as stipulated with a total variance of 56%. Items loaded to problem focus coping with 57% minimum and 70% maximum of variance. For emotion buffering dimension we obtained 59% minimum and 73% of variance. The variance for family and friends stood at 51% minimum and 61% maximum. Results are presented in Table 3.

Internal consistency

Base on Cronbach's alpha calculations, the internal consistency for CSES was determined. An alpha value of .80 was obtained for problem focus, .79 for emotions buffering and .69 for family and friends support. An overall alpha value of .76 was obtained for the whole instrument thus making the used of the instrument acceptable among refuges and asylum population. Results are shown in Table 3.

Factorial Validity of the Munroe Multicultural Attitude Scale Questionnaires (MASQUE)

The three factors sorted out through component analysis (varimax rotation) produces a total variance of 58%. Items loaded to the care dimension with a minimum variance of 53% and 69% maximum. For the know dimension, items produces a minimum variance of 50% and maximum of 73%. For the act dimension, the minimum variance stood at 54% and 69% maximum. Results are shown in Table 4.

Internal consistency

We investigated the internal consistency of MASQUE through Cronbach's alpha calculations. The act sub-scale produces an alpha value of .68 while the know sub-scale produces an alpha of .74. At the same time, the care sub-scale alpha stood at .76. The overall alpha for the instrument stood at .84 thus making it reliable for used among refugee and asylum population. Results are indicated in Table 4.

Factorial Validity of the Ways of Coping Questionnaire (WCQ)

Four dimensions were considered for this study. The overall variance for the dimensions chosen was 81%. Items loaded to positive reappraisal with minimum variance of 55% and maximum of 75%. For the planful problem solving dimension, the minimum variance was 51% while maximum was 69%. Seeking social support items produces a minimum variance of 58% and maximum of 85%. For the dimension of accepting responsibilities, items loaded with a minimum variance of 54% and maximum of 80%. Results are shown in Table 5.

Internal consistency

With the help of Cronbach's alpha, we established the reliability of the instrument. The alpha coefficient values stood as .76 for positive reappraisal, .70 for accepting responsibilities, .79 for seeking social support and .71 for planful problem solving. The overall alpha coefficient stood at .83. With these acceptable alpha values, the instrument can therefore be used in refugees and asylum sample. Details results are shown in Table 5.

Table 2
Reliability and factorial structure of MSPSS

Support by friends (Alpha = .70)	Factor 1	Factor 2	Factor 3
6. My friends Really try to help me	.57		
7. I can count on my friends when things go wrong	.55		
9. I have friends with whom I can share my joys and sorrows	.61		
12. I can talk about my problems with my friends	.63		
Support by family (Alpha = .72)			
3. My family really helps me		.54	
4. I get the emotional help and support I need from my family		.63	
8. I can talk about my problems with my family		.53	
11. My family is willing to help me make decisions		.70	
Support by other significant people (Alpha = .71)			
1. There is a special person who is around when I am in need			.61
2. There is a special person with whom I can share my joys and sorrows			.52
5. I have a special person who is a real source of comfort to me			.59
10. There is a special person in life who cares about my feelings			.68
Total (Alpha = .79)			

Table 3
Reliability and factorial structure of CSES

Problem oriented self-efficacy (Alpha = .80)	Factor 1	Factor 2	Factor 3
3. Sort out what can be changed, and what cannot be changed	.61		
5. Find solutions to your most difficult problems	.57		
6. Break an upsetting problem down into smaller parts	.55		
7. Leave options open when things get stressful	.70		
8. Make a plan of action and follow it when confronted with a problem	.66		
20. Think about one part of the problem at a time	.68		
Emotions buffering oriented self-efficacy (Alpha = .79)			
10. Take your mind off unpleasant thoughts		.73	
12. Keep from feeling sad		.59	
15. Stop yourself from being upset by unpleasant thoughts		.53	
19. Make unpleasant thoughts go away		.62	
Family and friends oriented self-efficacy (Alpha = .69)			
4. Get emotional support from friends and family			.51
16. Make new friends			.61
17. Get friends to help you with things you need			.53
Total (Alpha = .76)			

Table 4

Reliability and factorial structure of MASQUE

The know dimension (Alpha = .74)	Factor 1	Factor 2	Factor 3
1. I realize that racism exists	.53		
2. I know that social barriers exist	.61		
3. I understand religious beliefs differ	.58		
4. I understand sexual preferences may differ	.59		
5. I understand that gender-based inequities exist	.69		
6. I accept the fact that languages other than English are spoken	.60		
7. I do not understand why people of other cultures act differently	.56		
The care dimension (Alpha = .76)			
8. I am sensitive to respecting religious differences		.66	
9. I am sensitive to differing expressions of ethnicity		.73	
10. I am emotionally concerned about racial inequality		.54	
11. I am sensitive toward people of every financial status		.50	
12. I am not sensitive to language uses other than English		.61	
13. A person's social status does not affect how I care about people		.56	
The act dimension (Alpha = .68)			
14. I do not act to stop racism			.64
15. I actively challenge gender inequities			.54
16. I do not actively respond to contest religious prejudice			.61
17. I respectfully help others to offset language barriers that prevents communication			.69
18. I do not take action when witnessing bias based on People's preferred sexual orientation			.56
.Total (Alpha = .84)			

Table 5

Reliability and factorial structure of WCQ

Seeking social support (Alpha = .79)	F1	F2	F3	F4
8. Talked to someone to find out more about the situation	.61			
18. Accepted sympathy and understanding from someone	.58			
22. I got professional help	.55			
31. Talk to someone who could do something concrete about the problem	.63			
42. I ask a relative or friend I respected for advice	.75			
45. Talk to someone about how I was feeling	.85			
Positive reappraisal (Alpha = .76)				
20. I was inspired to do something creative		.60		
23. Change or grew as a person in a good way		.52		
30. I came out of the experience better than when I went in		.73		
36. Found new faith		.62		
38. Rediscovered what is important in life		.70		
56. I change something about something		.75		
60. I prayed		.56		
Planful problem solving (Alpha = .71)				
1. Just concentrate on what I had to do next-next step			.64	
26. I made a plan of action and followed it			.51	
39. Changed something so things would turn out all right			.61	
48. Drew on my past experience , I was in a similar situation			.69	
49. I knew what had to be done, so I doubled my efforts to make things work			.52	
52. Came up with a couple of different solutions to the problem			.55	
Accepting responsibilities (Alpha = .70)				
9. Criticized or lecture myself				.54
25. I apologized or did something to make up				.62
29. Realized I brought the problem on myself				.59
51. I made a promise to myself that things would be different next time				.80
Total Alpha = .83				

Inter-measure correlation of all the sub-scales

The correlation of all sub-scale used are presented in Table 6. With the help of Cohen effect-size magnitude of correlation. Correlation values above .10 are considered small, while those above .30 are considered medium and above .50 are considered large (Cohen, 1988). As shown in Table 6, coping self-efficacy, ways of coping and social support sub-scale have a correlation value well above the medium size indicating that they are not totally independent of each other. All correlations were significant at .01 and .001 Level.

Table 6

Inter- correlation of all the sub-scales of MSPSS, WCQ, CSES and MASQUE

Construct		1	2	3	4	5	6	7	8	9	10	11	12
1	FR												
2	FA	.36***											
3	S O	.13**	.51***										
4	P R	.21***	.31***	.38***									
5	AR	.18**	.26***	.19**	.48***								
6	SSS	.26***	.19**	.27***	.32***	.53***							
7	PPS	.39***	.41***	.33***	.38***	.32***	.31***						
8	PRF	.32***	.17**	.20***	.19***	.22***	.41***	.37***					
9	EM	.19**	.20***	.31***	.28***	.17**	.24***	.27***	.25***				
10	F/F	.21***	.25***	.18**	.25***	.20***	.33***	.24***	.22***	.22**			
11	KN	.35***	.23***	.22***	.24***	.34***	.19**	.18**	.20***	.21**	.17**		
12	AC	.33***	.30***	.28***	.33***	.28***	.22***	.23***	.18***	.25***	.23***	.34***	
13	CA	.29***	.27***	.21***	.31***	.17**	.20**	.19**	.22**	.18**	.21**	.31***	.29***

***$p < .001$ **$p < .01$ Two tail testing.

Legend : Multidimensional Scale of Perceived Social Support (MSPSS): FR = Friends, FA = Family, SO = Significant others ; Ways of coping Questionnaire (WCQ): PR = Positive Reappraisal, AR = Accepting Responsibilities, SSS = Seeking Social Support, PPS = Planful problem solving ; Coping Self-Efficacy Scale (CSES): PRF = Problem Focus, EM = Emotional, F/F = Friends and Family ; Munroe Multicultural Attitude Scale Questionnaire (MASQUE): KN = Know, AC = Act, CA = Care.

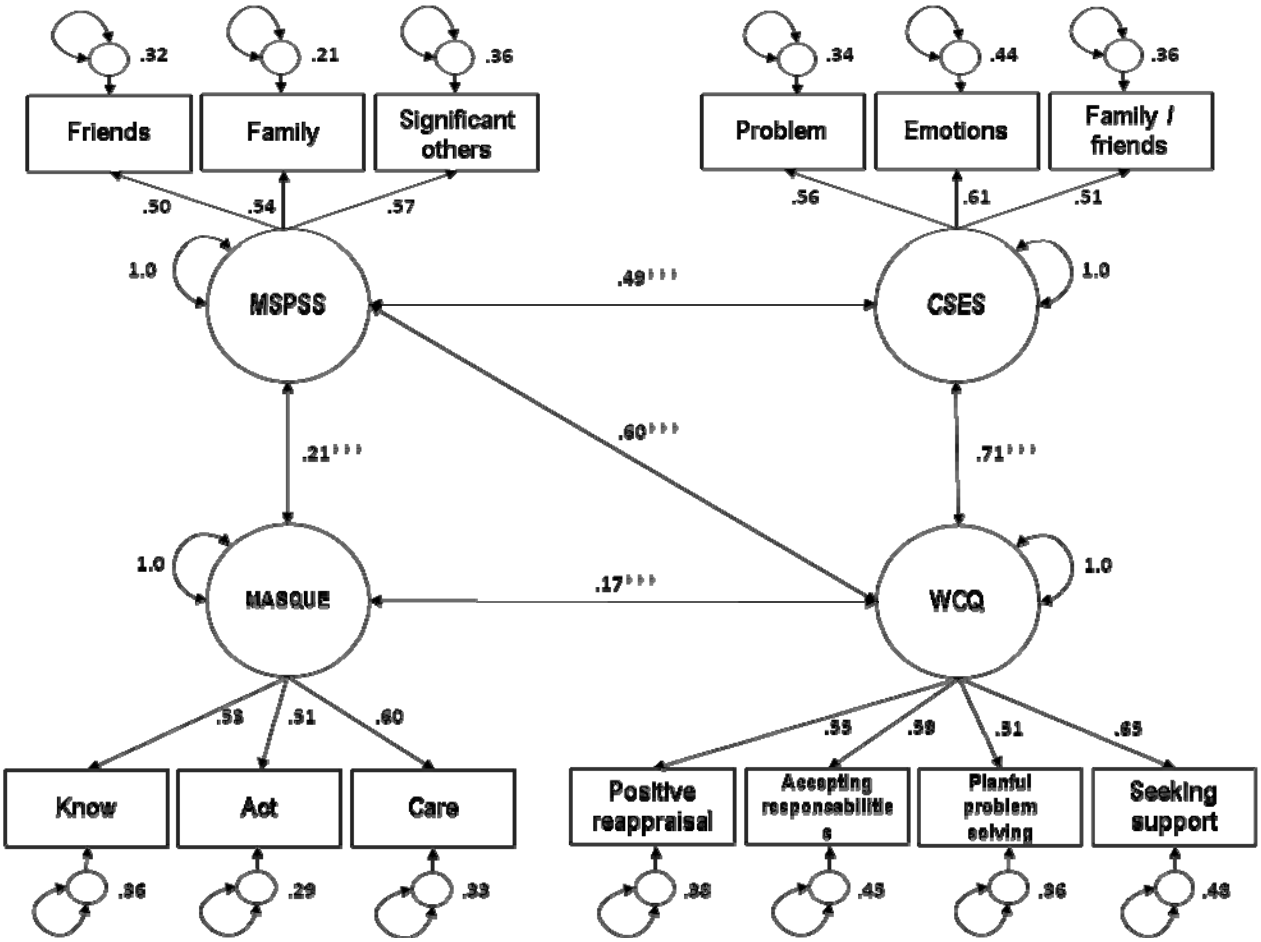
Results

The Social Support, Self-Efficacy, Multicultural Attitude and Coping Model

The first step of evaluating a structural regression model starts with performing the Confirmatory Factor Analysis (CFA) (Kline, 1998). Correlations were significant at $p <$ .001 for all latent variables. That is, social support relate with coping self-efficacy at $r =$ .49 $p <$ .001, Social support with ways of coping at $r =$ .60 $p <$ .001, Social support with multicultural attitude at $r =$ .21 $p <$ .001, Ways of coping with multicultural attitude at $r =$ .17 $p <$ .001 and coping self-efficacy with ways of coping at $r =$ .70 $p <$ .001. The model yields a weak fit, which means that the model did not fit as well to the data as expected CFI = .94, RMSEA = .08, SRMR = .05. Possible reasons and solutions for this misfit are discussed in annex 6. The confirmatory factor analysis model is presented in Figure 1 with Fit indices presented in Table 7.

The Effects of Social Support, Self-Efficacy and Multicultural Attitude on Coping

As hypothesized, the latent structural regression model produces positive significant paths at .01 and .001. The causal direction as theoretically presumes were significant at .01 and .001 level respectively. That is social support predict coping self- efficacy at $\beta =$ .42 $p <$ .01, social support on coping with stress at $\beta =$.58 $p<$ .01, social support on multicultural attitude at $\beta =$ .31 $p <$ .01, multicultural attitude on coping with stress at $\beta =$ .28 $p <$ .001 and finally self-efficacy on coping with stress at $\beta =$ .71 $p <$ .01. The model did not fit well to the data with CFI = .94, RMSEA = .08 and SRMR = .04. Possible reasons and solutions for the misfit are discussed in annex 6. The evaluated model is presented in Figure 2 with overall fit indices presented in Table 8.

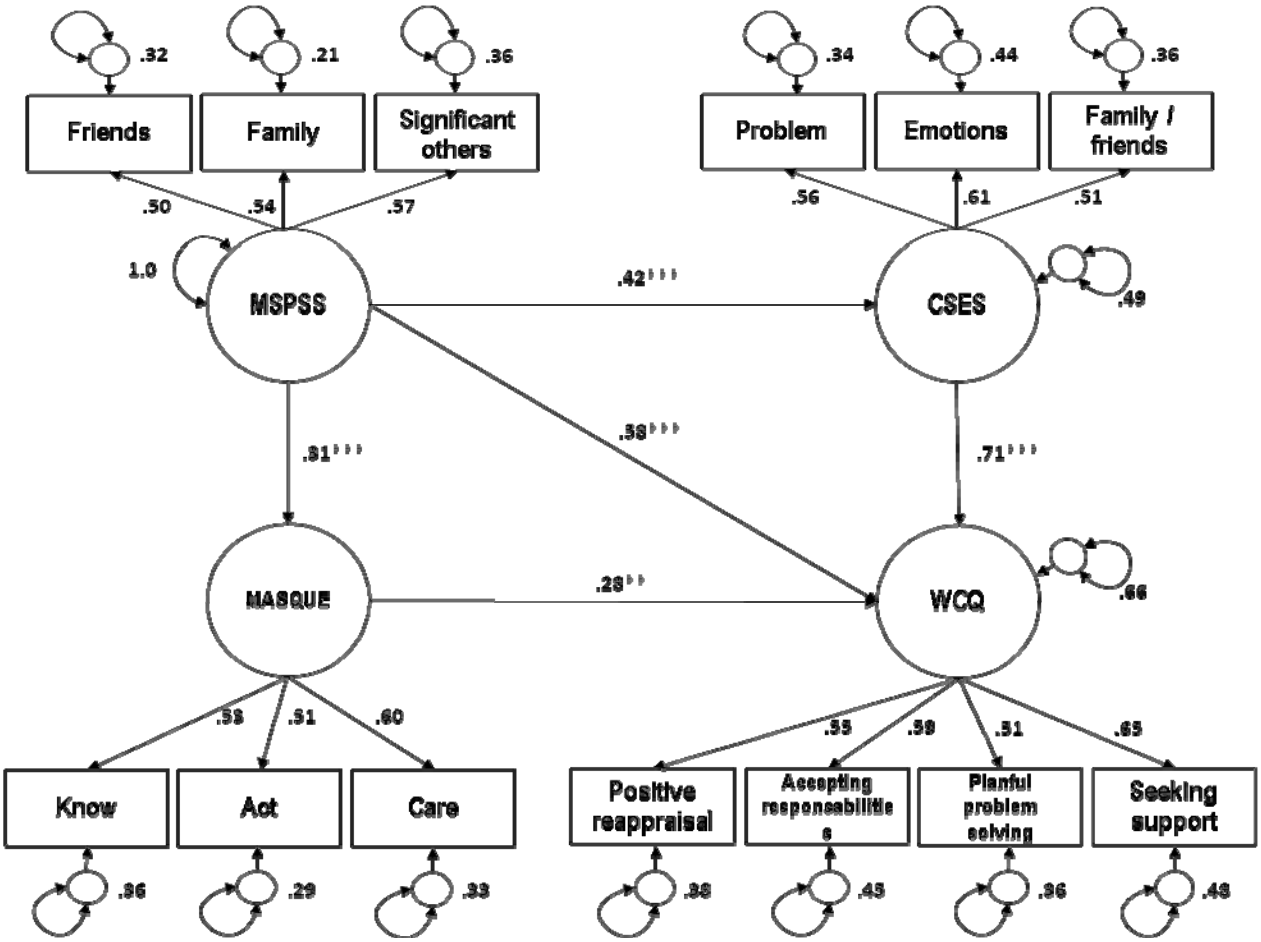


***$p < .001$

Figure 1. Confirmatory factor analysis (CFA) for the constructed model at (N = 221)

Table 7
Overall model fit indices

Model fit indices	Results	Recommended values (Kline, 1998)
CFI	.94	≥ .90
RMSEA	.08	< .05
SRMR	.05	< .08



***$p < .001$ **$p < .01$

Figure 2. Latent structural regression (SR) model evaluated at (N = 221)

Table 8

Overall model fit indices

Model fit indices	Results	Recommended values (Kline, 1998)
CFI	.94	≥ .90
RMSEA	.08	< .05
SRMR	.04	< .08

Discussion

The findings from this study indicates that the evaluated model can be used in psychological intervention programs that are directly concern with helping refugees and asylum seekers to cope with stress. Firstly, as hypothesized the provision of social support greatly predict adaptive ways of coping among refugees and asylum seekers. This indication goes in line with findings from other research. For example good social support is link to adaptive coping and thus low PTSD and post-migration stress (Gerritsen et al., 2006). From another perspective, social support is associated with effective coping which intend enhances good health and thus lower stress among refugees and asylum seekers (Plante, Simicic, Anderson, & Manuel, 2002). Equally social support is a protective factor against depression (Schiltz, Houbre, & Martiny, 2007). This maybe true as it is associated with effective ways of coping. Secondly, base on our findings, believing in one's strength to cope is also associated with effective coping strategies. Although no practical findings have been done before hand among refugees and asylum seekers, authors do predict that coping self-efficacy is important in stress and coping (Bandura, 1997). Individuals with good level of self-efficacy tend to derived more adaptive ways of coping than their counterparts (Salanova, Garu, & Martinez, 2006). With this in mind, findings from this study maybe a starting point in assuring the positive role played by self-efficacy in effective coping. Furthermore, provision of social support is link to a certain degree of self-efficacy. Social support promotes and burst confidence (Harrop, Addis, Elliot, & Williams, 2006). In our findings, social support did increase the level of confidence to cope with stress among refugees and asylum seekers at a significant level. Equally, social support was significantly associated with multicultural attitude. Social support has the potential to provide information and guidance which helps in breaking multicultural barriers such as language (Colic-Peisker & Tilbury, 2003). Finally, multicultural attitude loaded positively but only significant on coping with stress at .01. Although the multicultural attitude have been reported to play a rule in coping (P. T. Wong & J. C. Wong, 2005) our latent regression model remain the only practical studies that has investigated the predicting power of multicultural attitude on coping. Not withstanding, the confirmatory factor analysis indicated that there exist a significant relationship between the two. Contradicting our expectations, the two models failed to fit

to the data. (Possible reasons and solutions for this misfit are discussed in annex 6). However, the positive causal directions of the psychological variables remain important as a starting point when creating a psychological intervention programs for refugees and asylum seekers in a multicultural context.

Methodological limitations and future directions

First and foremost, our sample size may pose a problem. It is suggested that for every each item, there should be 10 cases (Kline, 1998). However it is widely accepted to think of sample size in structural equation modeling by considering ratio of cases to the number of parameters, in this direction a sound sample size will be 20:1 (Jackson, 2003). Here, it means that, if we have a 10 parameter model, the required sample size will be 20 X 10 (N = 200). In our model, there exist 13 parameters implying that our sample size requirement will be 20 X 12 (N = 260) against (N = 221) used. Although the sample ratio could still be 10:1, but as the ratio reduces the trustworthiness of the model is reduced (Kline, 2010). It therefore means that an ideal ratio will be 20:1. Although it is general that articles with $N \geq 200$ are accepted, our model may have suffered from a trustworthiness syndrome. As a way foreword, it will be advisable to carry out the study with a large sample size in the future. Such a study will help in minimizing standard error calculations in model fit.

Also, our latent model chi-square value was $\chi^2_m(65) = 157$ $p < .01$. Normally χ^2_m should not be significant in model evaluation (when the model fits to the data). Although it is argued that the chi-square should not be consider when evaluating the model fit since it is affected by factors such as sample size. When N is between 200 and 300, one may expect to obtain a non significant χ^2_m value. Therefore if χ^2_m is significant at this N, this maybe signaling a problem in the model (Kline, 2010). In future, there is a need to carry out diagnostic studies that will help in identifying the problem in the model if any.

Secondly, our dimension reduction through factorial analysis may have suffered a sample size problem. At N = 200, factorial analysis became just fair (Comrey & Lee, 1992). This is so because as N increases sampling error is reduce thus factor analyses become more stable. Although this is a generally accepted conception, studies have found this role of thumb unfounded since sample size did not affect the trustworthiness of factorial analysis

(Maccallu, Widaman, Zhang, & Hong, 1999; Maccallu, Widaman, Zhang, Preacher, & Hong, 2000). Even with this unfounded result, our fair sample size may have reduced the factor analysis stability. Implying that future study should make used of a large sample size, such as to minimize sampling error and factorial instability.

Also, the reliability of our instruments in parts may pose a problem. This is so because in structural equation modeling the reliability of each sub-scale must be well established. While Alpha coefficient values of .90 are considered excellent those of .70 are just adequate and accepted for research purposes (Nunnaly & Bernstein, 1994). In coping self-efficacy, the friends and family dimension produces an alpha value of .69 while in the multicultural attitude the act dimension produces an alpha value of .68. These values are below the expected threshold thus our observed variance may not be free from random errors. Not withstanding, provided that CFA are conducted poor reliability values can produce accurate results in Latent regression models (Little, Lindenberger, & Nesselroade, 1999). In future study, a test-retest approach maybe necessary to control the stability of these alpha values.

At the same time, this was just a transversal study thus making it difficult to judge whether the evaluated model is stable across time. A future study that takes a longitudinal approach may help in throwing some light on the time factor.

Equally there was no back-translation thus the violation of standard protocol may have set in. With back translation the semantic of each measure is verified and assured (Mallinckrodt & Wang, 2004). A back-translation will be needed in future such as to established and verified the trustworthiness of the translated instruments from English to French such as ways of coping, multicultural attitude and self-efficacy scales. Conducting a back-translation of these translated scales (WCQ, CSES, MASQUE, and MSPSS) will be an interested major project in the future.

Psycho-social implication of the study

Four important psycho-social variables were involved in this study. That is social support, coping self-efficacy, ways of coping and multicultural attitude. All the variables have significantly inter-related to each other. Secondly, the presumed causal relation has been proven. In spite of this good causaul relationship among the variables, the models

yield a weak fit. Refugees and asylum seekers proper integration to their host country greatly depends on how they will cope with post-migration and acculturation stress (Birman, Simon, Chan, & Tran, 2014). In light of this, approaches that will help individuals in building proper coping strategies once they arrived in their host countries are desirable (Stewart, Simic, Shiza, Makumbe, & Makwarimba, 2012). Base on findings from this study, a culturally sound oriented social support can go a long way in restoring proper coping strategies among refugees and asylum seekers. Here, multicultural psychological precondition should be integrated in the social support components. When social support was gender and culturally oriented, there was an increase in social integration followed by decrease in isolation with a sharp rise in adaptive coping strategies (Stewart et al., 2012). In another attempt, culturally oriented social support with multicultural components reduces psychological stress and raises the quality of life through coping (Goodkind et al., 2014). A culturally oriented social support will build resilience, raise the self-esteem and thus enhance the proper healthier integration of refugees and asylum seekers in their host countries. Equally, organizing multicultural competencies training for refugees and asylum seekers maybe of added advantage. As shown from this findings, multicultural attitude have its own part to play when it comes to coping with stress. This maybe because, refugees and asylum seekers form one of the biggest diverse cultural population hence psychological preconditions associated with multicultural attitude maybe a burden to them.

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Chapter 6

Self-Efficacy and Social Support as Predictors of Multicultural Attitude among Refugees and Asylum Seekers

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Abstract

The study investigated the predicting effect of social support and self-efficacy on the multicultural attitude of refugees and asylum seekers. At the same time, the effect of gender and length of stay in the host country on multicultural attitude was verified. At *N* = 221, asylum seekers in Luxembourg took part by completing the Multidimensional Scale of Perceived Social Support (MSPSS*)*, Coping Self-efficacy Scale (CSES), and Multicultural Attitude Scale Questionnaire (MASQUE). With the help of multiple linear regression analysis, gender was the only predictor of multicultural attitude. Through structural equations analysis, the predicting effect of social support and self-efficacy on multicultural attitude was established. While all paths in the model were positive and significant, the evaluated model failed to fit well to the data. Despite the lack of fitness in the model, findings from this study show that the causaul interaction of the evaluated psychological dimensions can be of good help to health practitioners when it comes to constructing an effective psycho-social therapy. Results will be handled by laying emphasis on available psycho-multicultural studies and recommendation made to health practitioners working with refugees and asylum seekers.

Keyword: Refugees, asylum seekers, social support, self-efficacy, multicultural attitude

Introduction

As culture is taking the center stage of research in stress and coping, there is more evidence that a positive multicultural society is needed for proper psychological integration. A positive multicultural attitude entails a proper adaptation and integration to societies (P. T. Wong & J. C. Wong, 2005). For good integration strategies to be achieved, societies need to be openly multicultural with certain psychological characteristics respected (Berry & Kalin, 1995). These psychological characteristics include: accepting societal values and diversity, low level of prejudice such as minimal ethnocentrism, racism and discrimination with a positive mutual attitude among cultural groups (Kalin & Berry in Press). A sound positive multicultural individual should be able to know the existence of various psychological preconditions (social differences, prejudice, racism, gender, and language difference), care and act against them (Munroe & Pearson, 2006). In light of this, a mutual and positive multicultural attitude is what cross-cultural psychologist drive for. For instance, "any claim of truth must be viewed through the lens of multiculturalism" (P. T. Wong & J. C. Wong, 2005, p. 9). Additionally, there are calls for multicultural competence training and multicultural counseling (Leong & Wong, 2003). As these calls are aimed at the general public, they particularly suit the context of refugees and asylum seekers as they are considered to be force immigrant. Refugees are constantly confronted with various psychological preconditions that suit a multicultural context as they struggle to settle in their host country (Slavin, Rainer, McCreary, & Gowda, 1991). Therefore various factors that may contribute to a positive multicultural attitude among refugees and asylum seekers remain important. This is because a positive multicultural refugee is likely to have a smooth psychological integration thus reducing his or her acculturation stress while a good level of wellbeing is maintained (Renner, Laireiter, & Maier, 2012; Rouyburd & Friedlander, 2008). Self-efficacy which helps in restoring individual's level of self-esteem could be of great help when it comes to bursting the level of multicultural attitude. This is so because self-efficacy helps in building control over an individual's motivation and social environment (Bandura, 1986, 1997). As a way of cognitive self-assessment, it may assist in bursting individual's goals including multicultural attitude attainment. There has been a call for

the involvement of self-efficacy in studies that involved individuals with divers' trauma (Benigth & Bandura, 2004). Therefore the involvement of self-efficacy in refugees and asylum seekers research remains inevitable (Pahud, Kirk, Gage, & Hornblow, 2009). Social support which acts as external resources in restoring positive coping could be of great help when it comes to multicultural attitude. Firstly, social support reduces acculturations stress (Renner et al., 2012; Williams & Berry, 1991). Secondly, social support restore resilience base practice among refugees and asylum seekers (Ghazinour, Richter, Emami, & Eisemann, 2003). In accordance with this, a positive multicultural attitude maybe restores which entails the reduction of psychological preconditions associated with multicultural attitude. Authors have reportedly call for research with social support, self-efficacy and multicultural attitude among refugees and asylum seekers (Bernigth & Bandura, 2004; Pahud, Kirk, Gage, & Hornblow, 2009; P. T. Wong & J. C. Wong, 2005). However, we have found no studies in which social support and self-efficacy were evaluated as predictors of multicultural attitude among refugees and asylum seekers. The aims of this study were to evaluate; 1) the predicting power of length of stay in the host country and gender on multicultural attitude; 2) a psychological model with self-efficacy and social support acting as predictors of multicultural attitude; 3) the psycho-Social therapeutic lessons learned from the evaluated model.

Method

Setting and context of study

Due to a high influx of refugees and asylum seekers into Luxembourg, the Luxembourgish government has established a good number of asylum centers. These centers act as their temporary residents where they are constantly orientated by a group of social workers and psychologist. These centers include:

Red Cross Luxembourg

The Red Cross in Luxembourg through its migration and refugee department operates three houses welcomed, oriented and provide psycho-social support to migrants seeking international protection in Luxembourg. The Don Bosco reception centre act as the first

reception house for migrants that have introduced their international protection application at the ministry of foreign affairs. At the same time, the centre saves as an emergency house for migrants seeking international protection but has not yet located the refugee department at the ministry of external affairs. The centre has the capacity of N = 150. The Red Cross migration and refugee department is equally in position of Félix Chomé foundation house with a capacity of about N = 60. Here, priority is given to persons with special needs (social, psychological, physical, educational etc) reason for which there is the presence of a permanent psychologist. In this centre, the team constantly organised educational, cultural and leisure activities for residents. Furthermore, there is equally Félix Schroeder centre with a capacity of N = 50. Here only single women with young children are admitted. At the same time, residents participate in different social, educational and cultural activities organised by a team of educators working in the centre.

Caritas Luxembourg

Caritas operate a centre which helps in orienting asylum seekers in Luxembourg through the presence of a sociologist. Equally in this centre, Muslim asylum seekers met every Friday to practice their faith. The centre also has a small capacity of hosting 10 to 15 people. Also, Caritas is in position of Saint Anthony's house with a capacity of N = 88. Here individuals and families seeking asylum are been housed and help by a divers group of educators. Help here is focus on health issues, procedures for seeking asylum, social, studies and leisure activities. At the same time, foyer Ulysses under Caritas equally acts as a centre for asylum seekers. Here they can take a free bath, tea and some food.

Sample

Demographic information on refugees and asylum seekers was obtained from Red Cross and Caritas Luxembourg. Between 2011 and 2013, 1500 asylum seekers were contacted. After the first contact, 900 asylum seekers gave their feedback. 56% wish to participate, 11% refused, 16% refused by raising concerns over the confidentiality of the study despite our reassurance and 16% refused base on time constraint. A total of 420 asylum

seekers participated through out the data collection process. Base on age, gender, country of origin and time spend in Luxembourg, the sample was statistically represented (Table 1). The asylum seekers came from 20 different countries, 40% Montenegro, 12% Bosnia-Herzegovina, 10% Albania and 8% Algeria. More than 60% of the sample has lived in Luxembourg for a period of 12 months and above. The questionnaires were administered directly by the researcher at each centre or handed to the participant to be return on a latter date. Of the 420 questionnaire handed to the participants, 350 were return. Of the 350 return questionnaires, 69% were properly completed while 31% were partially completed thus discarded from the analysis.

Table 1

Summary of socio-demographic characteristics

		Total (*N* = 221)		Female (*n* = 79)		Male (*n* = 142	
Country of origin *n* (%)	Montenegro	61	(28)	25		36	
	Bosnia-H	50	(23)	21		29	
	Albania	31	(14)	12		19	
	Algeria	15	(7)	2		13	
	Afghanistan	9	(4)	2		7	
	Syria	7	(3)	0		7	
	Nigeria	7	(3)	2		5	
	others	41	(19)	15		26	
Age in years	Mean (*SD*)	37	(4)	33	(7)	42	(9)
	Maximum	57		50		57	
	Minimum	19		19		21	
Marital status *n*	Single	141		17		124	
	Married	60		49		11	
	Divorce	20		13		7	
Family size	Mean (*SD*)	7	(3)	6	(2)	6.6	(2.7)
	Maximum	8		7		8	
	Minimum	1		2		1	
Length of stay in Luxembourg (years and months)	Mean (*SD*)	5	(2)	2	(1.8)	3	(1.5)
	Maximum	10		5		10	
	Minimum	6	months	6	months	8	months
Time waiting for asylum response in years	Mean (*SD*)	5	(1.5)	3	(1.3)	4	(1.4)
	Maximum	10		6		10	
	Minimum	2		3		2.5	

Measures

Munroe Multicultural Attitude Scale Questionnaire (MASQUE)

The *Munroe Multicultural Attitude Scale Questionnaire (MASQUE)* (Munroe, 2003; Munroe & Pearson, 2006). This was first developed as a 28 items then latter on reduced to 18 items rated on a likert scale which ranges from 1 (strongly disagree) to 6 (strongly agree).The items belong to one of the following dimensions, know (e.g. *I understand religious belief may differ*), care (e.g. *I care about respecting divers cultural values*) act (e.g. *I act the same with each an everyone regardless of his or her economic status*). Although we administered the 28 items, it was latter on reduced to 18 items through factorial analysis thus corresponding to Munroe & Pearson (2006) new version. In a student sample, alpha values of .70, .70 and .58 were obtained for know, care, act subscales respectively. A total scale alpha was .80. (Munroe & Pearson, 2006).

Coping Self-Efficacy Scale (CSES)

The *Coping Self-Efficacy Scale (CSES)* (Chesney, Neilands, Chambers, Taylor, & Folkman, 2006) consists of 26 items on a scale ranging from 0 (cannot do at all) to 10 (certain can do). Further analysis has filtered out 13 items that belongs to problem focus coping (6 items), stop unpleasant emotions and thoughts (4 items), getting support from family and friends (3 items) dimensions. Through internal consistency and factorial analysis, the 13 items produced good psychometric properties (Chesney, Neilands, Chambers, Taylor, & Folkman, 2006). In an HIV seropositve sample suffering from depression, alpha values of .91, .91 and .80 for problem focus, emotional thoughts, friends and family support were obtained respectively (Chesney et al., 2006).

Multidimensional Scale of Perceived Social Support (MSPSS)

The *Multidimensional Scale of Perceived Social Support (MSPSS)* (Zimet, Dahlem, Zimet, & Farley, 1988) consists of 12 items on the likert scale. The scale ranges from 1 (strongly disagree) to 7 (very strongly agree). For the work at hand, we limit ourselves to 6 (strongly agree). This limitation is in line with other study where there was no effect on

the scale limitation. Indeed reliability is maintained between a 4 and 6 point likert scale. Increasing the scale beyond 6 point does not necessary affect reliability (Chang, 1994). Furthermore, these items falls under one of the following dimensions: support by friends (FR) (e.g. *I can talk about my problem with my friends*), support by family (FA) (e.g. *my family is willing to help me make decisions*), support from significant others (SO) (e.g. *there is a special person who is around when I am in need*). Through internal consistency and factorial validity, the MSPSS has been shown to have good psychometric properties (Canty-Mitchell & Zimet, 2000; Zimet, Powell, Farley, Werkman, & Berkoff, 1990). For example, the scale has been validated in Thailand with total score $\alpha = .87$. For each sub-scale, $\alpha = .84$, .85 and .74 were obtained for FR, FA, SO respectively (Mongpakara, Ruktraku, & Mongpakara, 2011).

Procedures

Authorization to met and collect data from asylum seekers was granted by the Red Cross department of refugee's centre in Luxembourg. The encountered took place in small groups at various centers. A small portion of data collection took place out of the refugee's centers. For example some asylum seekers were encountered in various sports centers in Luxembourg and others in camping centers. All participant were first brief about the research project and their anonymity assured as many raised fear of been a targeted by the ministry of foreign affairs if their information is shared. Participation was on voluntary basis.

Data analysis

As an approach to details out the demographic information, descriptive statistics were used. In order to validate our instruments, a series of psychometrics statistics were used. Firstly, factorial analysis was performed through the component analysis and varimax rotation approach. With this approach, the validity of all the instruments was established. Internal consistency was determined for all the sub-scales through Cronbach's alpha calculations. In order to establish the best predictors of multicultural attitude, gender and length of stay were computed as independent variables on multicultural attitude with the help of linear regression analysis. Structural Equation Model (SEM) was used in

evaluating our constructed model. All calculations were done with the help of SPSS 17 and MPlus 5.

Validating the Data Collection Instruments

Factorial Validity of the Multidimensional Scale of Perceived Social Support (MSPSS)

Base on factorial analysis, component and varimax rotation approach, a simplify structure of MSPSS was obtained. With this approach, three dimensions were confirmed (support from friends, family members and significant others) with 48.4% of total variance explained. In the support from friend's dimension, all items loaded with a minimum variance of 55% and maximum of 63%. From the part of family members support, a minimum of 53% and maximum of 71% were recorded for items loading. For the support of significance people, items loaded with 52% minimum and 68% maximum of variance. Details results are presented in Table 2.

Internal consistency

The internal consistency (Cronbach's alpha) for MSPSS was good and acceptable for all the three subscales. An alpha value of .70 was obtained in favor of support from friends, .72 in favor of support from family members and .71 in favor of support from significant people. The alpha of the whole instrument stood at .79 thus making it reliable for data collection in a refugee and asylum seeker sample. The results of the total and subscale alpha are found in Table 2.

Table 2

Reliability and factorial structure of MSPSS

Support by friends (Alpha = .70)	Factor 1	Factor 2	Factor 3
6. My friends really try to help me	.57		
7. I can count on my friends when things go wrong	.55		
9. I have friends with whom I can share my joys and sorrows	.61		
12. I can talk about my problems with my friends	.63		
Support by family (Alpha = .72)			
3. My family really helps me		.54	
4. I get the emotional help and support I need from my family		.63	
8. I can talk about my problems with my family		.53	
11. My family is willing to help me make decisions		.70	
Support by other significant people (Alpha = .71)			
1. There is a special person who is around when I am in need			.61
2. There is a special person with whom I can share my joys and sorrows			.52
5. I have a special person who is a real source of comfort to me			.59
10. There is a special person in life who cares about my feelings			.68
Total (Alpha = .79)			

Factorial Validity of the Munroe Multicultural Attitude Scale Questionnaire (MASQUE)

The three factors sorted out through component analysis (Varimax rotation) produces a total variance of 58%. Items loaded to the care dimension with a minimum variance of 53% and 69% maximum. For the know dimension, items produces a minimum variance of 50% and maximum of 73%. For the act dimension, the minimum variance stood at 54% and 69% maximum. Results are shown in Table 3.

Internal consistency

We investigated the internal consistency of MASQUE through Cronbach's alpha calculations. The act sub-scale produces an alpha value of .68 while the know sub-scale produces an alpha value of .74. At the same time, the care sub-scale alpha value stood at .76. The overall alpha value of the whole instrument stood at .84 thus making it reliable for used among refugees and asylum seekers. Results are indicated in Table 3. With this

internal consistency calculation, it should be noted that, though the act sub-scale produces a poor alpha value of .68, this value is above the original value (.58) obtained from student population by Munroe & Pearson (2006).

Table 3

Reliability and factorial structure of MASQUE

The know dimension (Alpha = .74)	Factor 1	Factor 2	Factor 3
1. I realize that racism exists	.53		
2. I know that social barriers exist	.61		
3. I understand religious beliefs differ	.58		
4. I understand sexual preferences may differ	.59		
5. I understand that gender-based inequities exist	.69		
6. I accept the fact that languages other than English are spoken	.60		
7. I do not understand why people of other cultures act differently	.56		
The care dimension (Alpha = .76)			
8. I am sensitive to respecting religious differences		.66	
9. I am sensitive to differing expressions of ethnicity		.73	
10. I am emotionally concerned about racial inequality		.54	
11. I am sensitive toward people of every financial status		.50	
12. I am not sensitive to language uses other than English		.61	
13. A person's social status does not affect how I care about people		.56	
The act dimension (Alpha = .68)			
14. I do not act to stop racism			.64
15. I actively challenge gender inequities			.54
16. I do not actively respond to contest religious prejudice			.61
17. I respectfully help others to offset language barriers that prevents communication			.69
18. I do not take action when witnessing bias based on People's preferred sexual orientation			.56
Total (Alpha = .84)			

Factorial validity of the Coping Self-Efficacy Scale (CSES)

After performing component analysis through Varimax rotation, the following results were obtained. Three dimensions were obtained as stipulated with a total variance of 56%. Items loaded to problem focus coping with 57% minimum and 70% maximum of variance. In the emotion buffering dimension, we obtained 59% minimum and 73% of maximum variance. The variance of family and friends stood at 51% minimum and 61% maximum. Results are presented in Table 4.

Internal consistency

Base on Cronbach's alpha calculations, the internal consistency of the CSES was determined. An alpha value of .80 was obtained for problem focus, .79 for emotions buffering and .69 for family and friends support. An overall alpha of .76 was obtained for the whole instrument thus making the used of the instrument in refugees and asylum seekers sample acceptable. Results are shown in Table 4.

Table 4

Reliability and factorial structure of CSES

Problem oriented self-efficacy (Alpha = .80)	Factor 1	Factor 2	Factor 3
3. Sort out what can be changed, and what cannot be changed	.61		
5. Find solutions to your most difficult problems	.57		
6. Break an upsetting problem down into smaller parts	.55		
7. Leave options open when things get stressful	.70		
8. Make a plan of action and follow it when confronted with a problem	.66		
20. Think about one part of the problem at a time	.68		
Emotions buffering oriented self-efficacy (Alpha = .79)			
10. Take your mind off unpleasant thoughts		.73	
12. Keep from feeling sad		.59	
15. Stop yourself from being upset by unpleasant thoughts		.53	
19. Make unpleasant thoughts go away		.62	
Family and friends oriented self-efficacy (Alpha = .69)			
4. Get emotional support from friends and family			.51
16. Make new friends			.61
17. Get friends to help you with things you need			.53
Total (Alpha = .76)			

Inter-measure correlation

The inter-correlations for all the sub-scales are presented in Table 5. Base on Cohen correlation assessment criteria, a correlation above .10 are considered small, while correlations above .30 are considered medium. At the same time, correlations above .50 are considered large (Cohen, 1988). Base on this, all our correlations values lie between small and medium effect size with significant levels at .01 and .001. As can be observed from Table 5, some sub-scales are not totally independent from each other. For example, family and friends in social support present a high correlation value of .42 with significant others, .39 with family in coping self-efficacy scale.

Table 5

Inter- correlation of all sub-scale of MSPSS, CSES and MASQUE

Construct		1	2	3	4	5	6	7	8
1	Friends								
2	Family	.35***							
3	S.others	.21***	.31***						
4	Problems	.18**	.26***	.19**					
5	Emotions	.26***	.19**	.27***	.32***				
6	Family/F	.39***	.42***	.33***	.38***	.32***			
7	Know	.32***	.17**	.20***	.19**	.22**	.21***		
8	Act	.19**	.20**	.31***	.28***	.17**	.19**	.31***	
9	Care	.21**	.25***	.18**	.25***	.20***	.29***	.27***	.34***

***$p < .001$ **$p < .01$ Two tail testing.

Legend : Multidimensional Scale of Perceived Social Support (MSPSS): Friends, Family, S. others = Significant others ; Coping Self-Efficacy Scale (CSES): Problem, Emotions, Family/F = Family and Friends ; Munroe Multicultural Attitude Scale Questionnaires (MASQUE): Know, Act, CA = Care.

Results

Feasibility of the study

Considering the cultural diversity of the study group, administering self-report questionnaires could be challenging. Therefore in line with this, the practical feasibility of the study was very crucial. This is so because our population comes from over 20 different countries implying different languages and different cultures. At the same time, knowing the cultural diversity background of the participants was crucial for a successful data collection. At least one in every four asylum seekers contacted declined to take part in the study although a majority of asylum seekers did express the importance of such a study and a wish to take part in it. Participants were always skeptical about the study raising fears of their information been passed to the police and immigration office. Through out the data collection session, reassurance together with the anonymity of the work provided the security needed for some asylum seekers to take part. Each time, the rating scale was orally explained for at least 30 minutes in general and in some cases individually. With this participatory approach, it was practically feasible to carry out the study with a heterogeneous sample. Most asylum seekers took part without any difficulties with just a few experiencing some difficulties that were immediately clarified. At the end, none of the participants were upset and many express the wish to see the results of the study. Sample characteristics and total scores are presented in Table 5.

Table 5

Sample characteristics and total scores

	MSPSS			MASQUE			CSES		
	n	*Mean*	*SD*	*n*	*Mean*	*SD*	*n*	*Mean*	*SD*
Gender									
Females	79	39.81	10.21	79	38.12	9.15	79	35.41	8.91
Males	142	42.70	11.17	142	39.31	10.03	142	37.52	9.33
Length of stay									
6-2 (M/Y)	85	27.2	7.83	85	31.92	10.56	85	29.44	7.93
3-5 (Y)	50	24.81	5.58	50	28.56	8.83	50	26.53	6.10
6 and above	86	30.3	10.54	86	33.77	10.74	86	31.22	9.11
Marital Status									
Married	141	41.33	11.71	141	43.21	12.10	141	39.31	10.12
Single	60	26.22	8.20	60	30.10	9.33	60	27.22	9.21
Divorced	20	18.23	5.24	20	19.22	6.24	20	20.34	7.32

M = Months Y = Years.

The predicting power of gender and length of stay on multicultural attitude

A linear multiple regression analysis was used in detecting the best predictor of multicultural attitude. The total score on multicultural attitude was the dependent variable while gender and length of stay were independent variables. Base on this approach, the overall adjusted *R* square was weak. That is R^2 = .10; *F* (4, 30) = 8.6*1* *p* = .101 of the total variance in the multicultural attitude means score can be explained by gender and length of stay in the host country (Table 6).

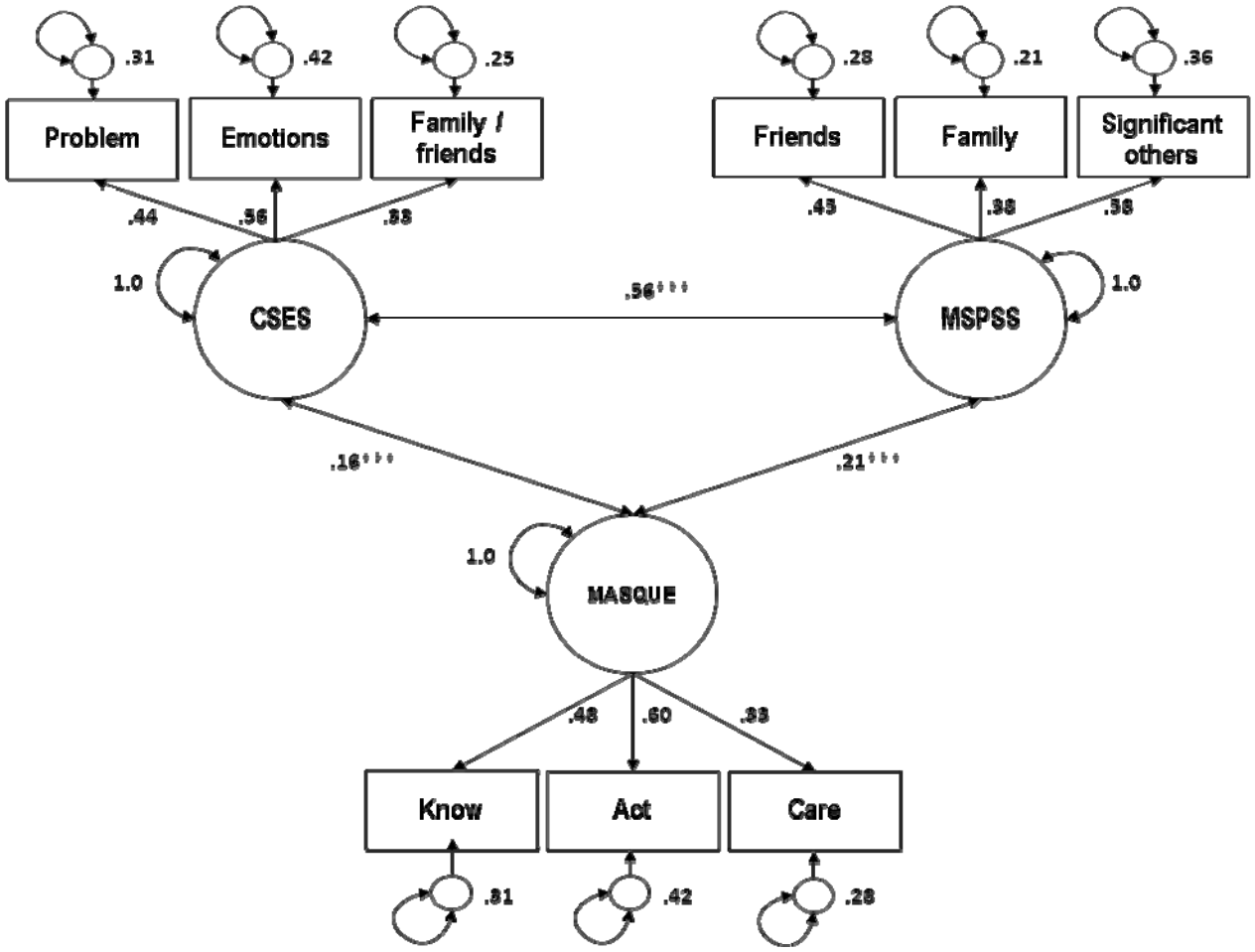
Table 6

Gender and length of stay as predictors of multicultural attitude

Total MASQUE Score				
Step 1	*B*	SE *B*	β	*p*
Gender	2.12	.66	.12	*P* < .001
Length of stay	1.63	.33	.10	*P* = .231

Social support and self-efficacy as predictors of multicultural attitude

In evaluating a structural regression model, we usually start by performing the Confirmatory Factor Analysis (CFA) that will help in detailing out the relationship between the tested variables (Kline, 1998). Correlations were significant at $p < .001$ for all latent variables. That is, social support relate to multicultural attitude at $r = .21$ $p < .001$, coping self-efficacy and multicultural attitude at $r = .16$ $p < .001$, social support and coping self-efficacy at $r = .56$ $p < .001$. Despite these positive correlational relationships, the model fails to fit well to the data with the following fit indices, CFI = .91, RMSEA = .14, SRMR = .05. In line with this bad fit, we attempted some possible explainations and solutions in annex 6. The confirmatory factor analysis model is presented in Figure 1 with detail fit indices presented in Table 7. As hypothesized, all paths in the latent structural regression model were positive and significant. That is, social support and self-efficacy simultaneously predicted multicultural attitude at $\beta = .28$ $p < .01$, $\beta = .25$ $p < .01$ respectively. As expected, self-efficacy equally predicts social support at $\beta = .68$ $p < .001$. There is evidence of the mediating effect of social support between self-efficacy and multicultural attitude. That is, self-efficacy will influence social support positively which will in turn exert a positive influence on multicultural attitude. In contrast with all these positive predictive directions, the overall model did not produce good fit with the data. The fit indices are as follows: CFI = .92, RMSEA = .14, SRMR = .06. Refering to the problems that may have led to a bad fit, we proposed some possible solutions in annex 6. The evaluated model is presented in Figure 2 with detail overall fit indices presented in Table 8.



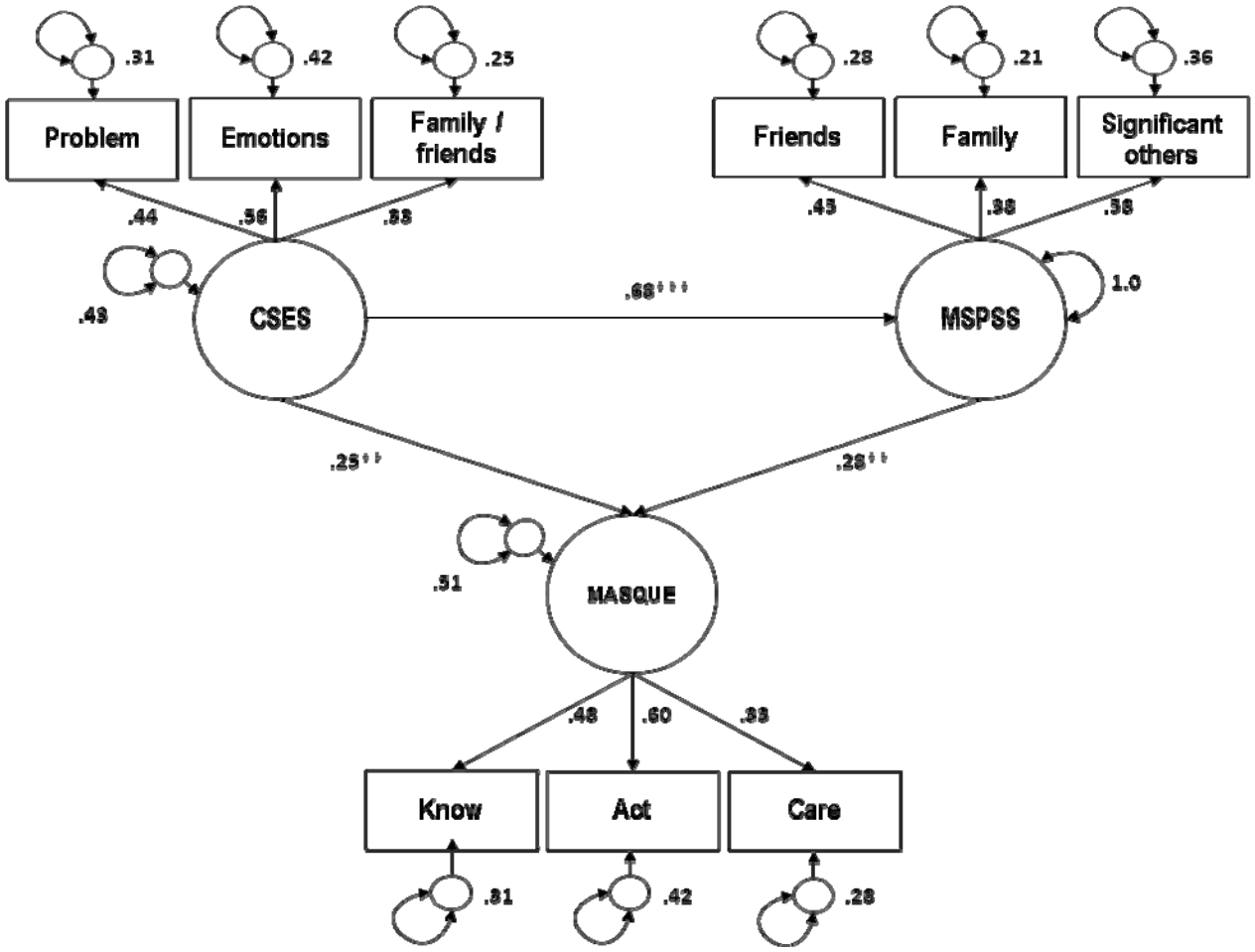
***p < .001

Figure 1. Confirmatory factor analysis (CFA) for the constructed model at (*N* = 221)

Table 7

Overall model fit indices

Model fit indices	Results	Recommended Values(Kline, 1998)
CFI	.91	≥ .90
RMSEA	.14	< .05
SRMR	.05	< .08



**p < .01 ***p < .001

Figure 2. Latent structural regression (SR) model evaluated at (*N* = 221)

Table 8

Overall model fit indices

Model fit indices	Results	Recommended values (Kline, 1998)
CFI	.92	≥ .90
RMSEA	.14	< .05
SRMR	.06	< .08

Discussion

This study assessed the predicting power of gender and length of stay in the host country on the multicultural attitude of refugees and asylum seekers. At the same time, the study evaluated a model where social support and self-efficacy are simultaneously affecting multicultural attitude of refugees and asylum seekers. As shown by regression analysis, gender did significantly predict multicultural attitude among asylum seekers. Although the length of stay in the host country did yield a positive regression value, its predicting power was not significant. Likewise, the overall value of the adjusted *R* for this model was not significant. The predicting effect of social support and self-efficacy on multicultural attitude was evident in the latent structural regression model with significant predicting strength.

The predicting strength of social support and self-efficacy on multicultural attitude do not deviate from recommendations made by several authors in the study of refugees and asylum seekers (Benigth & Bandura, 2004, Pahud et al., 2009; Steel, Silove, Phan, & Bauman, 2002) or suggestion in the study of population with traumatic life events (Altarriba & Santiago, 1994; Minas et al., 2013). Though with a different and less objective approach, Slavin et al., (1991) were able to show that a positive multicultural attitude is essential for proper psychological integration of refugees and asylum seekers.

The most robust predictor of multicultural attitude base on regression analysis was gender. This finding support the fact that, attempts to burst multicultural attitude among refugees and asylum seekers should take into consideration the gender variable. The encounter of client or patient with an attempt to deal with multicultural assessment should include gender and sexual orientation (Lam & Sue, 2001). Although the length of stay in the host country did not yield any significant results, a positive regression value still signified its important role in multicultural attitude. This is so because as an asylum seeker stay longer in the host country, he or she may learn and adjust to the various psychological pre-condition associated with multicultural attitude (Freddy & Ann-Marie, 2013). Therefore these psychological pre-conditions depending on how they are learn or

adjusted to, have a great role to play when it comes to psychological and general well-being of refugees and asylum seekers.

The magnitude of the predicting power of social support and self-efficacy on multicultural attitude was good and promising despite the bad fit produced by the model. This is so because a negative multicultural attitude could signal difficulties associated with acculturation, hence stress related disorders may set in (Freddy & Ann-Marie, 2013). For example psychological adjustment from one culture to another is at times associated with depression and suicidal act (Cheng, Tracy, & Henrich, 2010; Jonnalagadda & Diwan, 2005). Therefore in line with this, the findings from this study support the constant monitoring of multicultural attitude, provision of psycho-social support aimed at bursting the multicultural attitude among refugees and asylum seekers.

Limitations

The population from this study is of an exceptionally cultural diversified background. With this diversity, it is normally required that some clarifications in the validation of measurement instrument are well assessed. The validity and the reliability of the measurement instruments have been closely examine. First, the coping self-efficacy instruments have been validated in a culturally diversified population with some sort of stress related disorders (Chesney et al., 2006). Secondly, the social support questionnaire have been validated and used across a diverse culturally sound population background (Chou, 2000; Ekbäck, Benzein, Lindberg & Arestedt, 2013; Zimet, Powell et al., 1990). Thirdly the multicultural attitude instrument has been used and validated, though in a limited but sound diverse cultural population (Munroe, 2003; Munroe & Pearson, 2006). Equally, there was no visible evidence in the data which signified that adults from one culture perceived the items differently than others, not withstanding individual difference that did not surface in the data may have taken place. In the future, a longitudinal approach maybe used to measure the stability of item endorsement by asylum seekers.

In this present study, the predicting power of the length of stay in the host country was not significant. Although gender emerges as the sole predictor of multicultural attitude, both regression values were very low. This is contrary to what we may have expected, since it is commonly assumed that the length of stay in a host country plays a big rule in

adapting to various psychological preconditions that constituted multicultural variable (Berry & Kalin, 1995). This lack of good predicting power may have come from unequally culturally sound size group or perhaps it may simply be that these two socio-demographic variables are not predictors of multicultural attitude. This maybe so because, within one country there is an enormous diversity (gender, length of stay, age, individual subjective difference) among residents which makes it difficult to assess the broad effect of these socio-demographic variables on any psychological variable of emigrated population to Western Europe (Patel, 2001).

The inter measure correlation that were found in this study were significant, satisfactory but poor in parts. Base on Cohen (1988) approach, none of the correlation coefficient value did cross the medium size effect value. This may not be link to the diver's cultural population background but maybe directly related to the questionnaires used. First, all the three instruments used were translated from english to french, since the french version did not exist at the time of the study. Secondly, data collected in french was jointly analyzed with the one collected in english without any congruence evaluation between the two. In line with this, achieving semantic equivalence could be difficult giving rise to heterogeneous endorsement of items.

In other to minimized these challenges, a standardized diagnostic interview maybe used in combination with the questionnaires. This was not feasible in this study because none of such instrument existed, implying that such an approach requires the construction and validation of a standardized diagnostic interview. Equally, the used of diagnostic interview bring in itself some methodological challenges such as classification of culturally oriented psychological preconditions and confirmation of semantic equivalence across cultures (Cheng, 2001).

The psycho-social therapeutic lessons learned

It is highly recommended to review existing literature before the start of any intervention approach. There is evidence that refugees and asylum seekers may suffer from various psychological distress for a very long period of time (Steel, Momartin, Bateman, Hafshejani, & Silove, 2004). In light of this, assessing the multicultural attitude of refugees before the start of any intervention is highly recommended. This is so because a

negative multicultural status adds more stress related burden. Therefore, social support can be used which in turns burst the level of multicultural attitude and sell-efficacy. Once all psychological preconditions associated with multicultural attitude are satisfactory, the well being, resilience and psychological integration of vulnerable population into their host society is assured (Freddy & Ann-Marie, 2013).

Furthermore, there exist some models used in assessing the multicultural attitude of vulnerable population (Ridley, Li, & Hill, 1998) but there is no or little research that have examine factors affecting the multicultural attitudes of population with or at risk of psychological distress which then limit the creation of effective multicultural intervention approaches (Hays, 2009). Lack of these multicultural sound intervention approaches always leads to premature termination of psychotherapy (Sue & Zane, 1987). Literature including finding from this study concerning the mental and the multicultural needs of refugees suggest that a large scale of psycho-social care is needed to effectively fulfill the needs of refugees and asylum seekers (Kohli & Mather, 2003; Pahud et al., 2009).

Given the findings from this study, there are indications of beneficial impacts of social support and self-efficacy on multicultural attitude. It is therefore important that a large scale psycho-social intervention should be applied to refugees and asylum seekers in their various residential areas (asylum camps). A step by step care approach is needed which aimed at providing the necessary health care that goes a long way in reducing negative psychological preconditions associated with multicultural attitude. Here cognitive restructuring therapy maybe beneficial, since with it individuals are capable of reversing their previous negative thoughts (Benigth & Bandura, 2004). Periodic monitoring of these negative psychological preconditions associated with multicultural attitude is necessary so as to establish a timely and proper intervention. There is also evidence that teaching a vulnerable population various skills that could help in bursting their multicultural attitude can be beneficial (Lindsey, 1998). With this in mind, various multicultural training programs could be implemented in various refugees camp that has as objective the teaching of various social and adaptation skills that could be used for proper socialization and integration to the host country. Residential healthcare, cognitive restructuring and social training will enable these individuals to acquire the psychological

tools that are necessary to manage their great uncertainty level of psychological preconditions associated with multicultural attitude.

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Chapter 7

Coping and Social Support as Predictors of Quality of Life among Refugees and Asylum Seekers

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Article

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Abstract

This study assessed the predicting effect of social support and coping on quality of life among refugees and asylum seekers. Demographic characteristics such as gender and marital status were also check against coping and quality of life. At N = 221, asylum seekers responded to ways of coping, social support and quality of life questionnaires in Luxembourg. Gender and marital status did interact significantly with coping and quality of life at the multivariate level. The predicting effect of social support and coping were evident in the evaluated model through structural equation modeling approach. All paths loaded positively and significantly on quality. But in opposition to these positive predictions, the model yields a bad basic fit to our data. Nevertheless, results from this study indicated that, the positive causal effect of the psychological variables can indeed go a long way in helping mental health practitioners when it comes to setting up various psycho-social intervention approaches aimed at improving the quality of life among this vulnerable group. Results from this finding are discussed in the context of refugees quality of life and recommendations made to health practitioners.

Keywords: Refugees, asylum seekers, quality of life, social support, coping, gender, marital status

Introduction

Throughout the clinical and health psychology research, there is often the presence of some ambiguous results: the lack of social support is associated with maladaptive coping and poor quality of life among individuals with traumatic life experience which give rise to psychopathological manifestation (Akinyemi, Owoaje, Ige, & Popoola, 2012; Ghazinour, Richter, & Eisemann, 2004; Teodorescu, Heir, Hauff, Wentzel-Larsen, & Lien, 2012; Matanov et al., 2013). A refugee is any individual who by any profound reasons (war, persecution, etc) found his or her self in another country (host) and base on the given profound reasons cannot return to his or her own native country (UNHCR, 1995). In light of this, pre-departure difficulties, flight stress, transitional stress and post-arrival stress act or collectively induced the psychological distress face by these group of individuals (Felsman, Leong, Johnson, & Felsman, 1990). Therefore refugees who have experience traumatic events couple with poor or lack of social support are at risk of poor quality of life and psychopathological manifestations once in the host territory. A good number of recent studies have reported poor quality of life among refugees and asylum seekers (Giacco, Matanov, & Priebe, 2013; Mölsä et al., 2014; Sulaiman-Hill & Thompson, 2012). Furthermore, there is evidence suggesting that this poor quality of life is associated with maladaptive coping thus creating a series of various psychopathological manifestations ranging from depression, pain and somatic disorders (Buhmann, 2014; Kinzie et al., 2012). Refugees and asylum seekers are constantly faced with adaptation hassles in their host countries and at times violence together with discrimination. However, there appears to be no clear findings as to which type of emotional and behavioral disorders is induced by poor quality of life among refugees and asylum seekers. For instance trauma related experience correlate with psychological and social relations dimension of quality of life only (Opaas & Hartmann, 2013). Furthermore the presence of various coping resources gives refugees the required coping competencies to fight back various arising traumata while living a good quality of life (Ghazinour et al, 2004). On the other hand, when quality of life was examined among refugees and asylum seekers, the scores were too low (Schiltz, Houbre, & Martiny, 2007).

Refugees and asylum seekers are at a great risk of developing various emotional problems as a direct result of difficult demanding situations that force them to live a poor quality of life. In light of this, this group of individuals forms one of the vulnerable populations that are in constant need of well adapted psychosocial mental health care. However mental health care practitioners are often faced with challenges arising from cultural diversity and lack of proper studies in establishing effective interventions approaches. Therefore these challenges bring in a gap between research and effective clinical practice. Also, studies concerning refugees and asylum seekers used sample from either a less diversified or single community. Most studies do not investigate the predicting effect of various variables on quality of life although mental health professionals work to restore a good quality of life among refugees and asylum seekers. With the used of culturally divers sample, we can be able to construct a sound culturally adapted psychosocial mental health care system. The study that focuses on the predicting effect of coping and social support on quality of life with a culturally diversified sample will further ease the work of clinicians by helping them in adapting various standardized diagnostic psychological measures and psychosocial care.

The objectives of this present study consist of assessing the effect of the marital status on the quality of life among refugees and asylum seekers. The study will also assess if there is any significant difference in quality of life and coping associated with gender and marital status. Finally, the predicting effect of social support and coping on quality of life will be evaluated. It is hypothesized in this study that a) married refugees will sure a better quality of life than their counterparts b) gender will play a significant role in quality of life and coping c) social support and coping will simultaneously predict quality of life d) the model where social support and coping are predicting quality of life will fit well to the data.

Method

Setting

Once every week refugees and asylum seekers has the opportunity to encounter the researcher and answer the questionnaire. This encounter took place at various refugees' centers in Luxembourg between 2011 and 2014.

Red Cross Luxembourg

The Red Cross in Luxembourg through its migration and refugee department operates three houses that welcomed, oriented, and provide psycho-social support to migrants seeking international protection in Luxembourg. The Don Bosco reception centre act as the first reception house for migrants that have introduced their international protection application at the ministry of foreign affairs. At the same time, the centre saves as an emergency house for migrants seeking international protection but has not yet located the refugee department at the ministry of external affairs. The centre has the capacity of N = 150. The Red Cross migration and refugee department is equally in position of Félix Chomé Foundation house with a capacity of about N = 60. Here, priority is given to persons with special needs (social, psychological, physical, educational etc) reason for which there is the presence of a permanent psychologist. In this centre, the team constantly organised educational, cultural and leisure activities for residents. Furthermore, there is equally Félix Schroeder Centre with a capacity of N = 50. Here only single women with young children are admitted. At the same time, residents participate in different social, educational and cultural activities organised by a team of educators working in the centre.

Caritas Luxembourg

Caritas operate a centre which helps in orientating asylum seekers in Luxembourg through the presence of a sociologist. Equally in this centre, Muslim asylum seekers meet every Friday to practice their faith. The centre also has a small capacity of hosting 10 to

15 people. Also, Caritas is in position of Saint Anthony's house with a capacity of *N* = 88. Here, individuals and families seeking asylum are been housed and help by a divers group of educators. Help here is focus on health issues, procedures for seeking asylum, social, studies and leisure activities. At the same time, foyer Ulysses under Caritas equally acts as a centre for asylum seekers. Here they can take a free bath, tea and some food.

Participants and procedure

The sample was made up of participants from more than 15 different countries with diverse cultural backgrounds. Well represented countries were grouped while less represented ones were classified under others. The well represented countries were, Montenegro (*n* = 61), Bosnia (*n* = 50), Albania (*n* = 31), Algeria (*n* = 15), Afghanistan (*n* = 9), Syria (*n* = 7), Nigeria (*n* = 7). These represented countries produce a sample of *n* = 180 while the less represented countries yields a sample of *n* = 41. The study took place as a result of influx of refugees and asylum seekers in Luxembourg where resources such as proper psychosocial health care or adapted psychotherapy are limited. Refugees were included in the study if they could read and understand French or English language. Refugees were first informed at their various centers about the research project by the social workers at the centers. Participants who had doubt meet with the researcher for further clarification before the start of data collection. The objectives of the project were clearly explained to the participants and the anonymity of the studied assured. The duration of filling questionnaires ranges from 1 to 2 hrs depending on how many participants were present at each particular date. The social workers and researcher were always present during each data collection sessions thus providing the necessary assistance once needed. Participants show little signs of distress during the data collection session and were immediately counsel by the researcher. Details of socio-demographic information are shown in Table 1.

Table 1

Summary of socio-demographic characteristics of participants

		Total (*N* = 221)		Female (*n* = 79)		Male (*n* = 142	
Country of origin	Montenegro	61	(28)	25		36	
n (%)	Bosnia-H	50	(23)	21		29	
	Albania	31	(14)	12		19	
	Algeria	15	(7)	2		13	
	Afghanistan	9	(4)	2		7	
	Syria	7	(3)	0		7	
	Nigeria	7	(3)	2		5	
	others	41	(19)	15		26	
Age in years	Mean (*SD*)	37	(4)	33	(7)	42	(9)
	Maximum	57		50		57	
	Minimum	19		19		21	
Marital status *n*	Single	141		17		124	
	Married	60		49		11	
	Divorce	20		13		7	
Family size	Mean (*SD*)	7	(3)	6	(2)	6.6	(2.7)
	Maximum	8		7		8	
	Minimum	1		2		1	
Length of stay in	Mean (*SD*)	5	(2)	2	(1.8)	3	(1.5)
Luxembourg (years/months)	Maximum	10	months	5		10	
	Minimum	6	months	6	months	8	months
Time waiting for	Mean (*SD*)	5	(1.5)	3	(1.3)	4	(1.4)
asylum response in years	Maximum	10		6		10	
	Minimum	2		3		2.5	

Measures

The *Multidimensional Scale of Perceived Social Support (MSPSS)* (Zimet, Dahlem, Zimet, & Farley, 1988) consists of 12 items on the likert scale. The scale ranges from 1

(strongly disagree) to 7 (very strongly agree). For the work at hand, we limit ourselves to 6 (strongly agree). This limitation is in line with other study where there was no effect on the scale limitation. Indeed reliability is maintained between a 4 and 6 point likert scale. Increasing the scale beyond 6 point does not necessary affect reliability (Chang, 1994). Furthermore, these items falls in one of the following dimensions: support by friends (FR) (e.g. *I can talk about my problem with my friends*), support by family (FA) (e.g. *my family is willing to help me make decisions*), support from significant others (SO) (e.g. *there is a special person who is around when I am in need*). Through internal consistency and factorial validity, the MSPSS has demonstrated good psychometric property (Canty-Mitchell & Zimet, 2000). For instance, the scale has been validated in Thailand with total score $\alpha = .87$. For each sub-scale, $\alpha = .84$, .85 and .74 were obtained for FR, FA, SO respectively (Mongpakara, Ruktraku, & Mongpakara, 2011).

The *Ways of Coping Questionnaire* (WCQ) (Folkman & Lazarus, 1988) consist of 66 items rated from 1 (Not used) to 4 (Used a great deal). These items are classified into 7 dimensions which include, confrontive coping (e.g. *let my feeling out somehow*), distancing (e.g. *went on as if nothing bad happen*), self-controlling (e.g. *I try to keep my feelings to myself*), seeking-social support (e.g. *I got professional help*), accepting responsibilities (e.g. *criticized or lecture myself*), escape-avoidance (e.g. *hope a miracle will happen*), planful problem solving (e.g. *made a plan of action and follow*), Positive reappraisal (e.g. *found new faith*). The psychometric properties of this scale have been reported (Durak, Senol-Durak, & Elagöz, 2011). Only four dimensions corresponding to effective ways of coping were included in our analysis. Although, the reliability of each scale keep on producing only acceptable values (Nunally, 1978), they are still used and accepted in the clinical field. For instance, in an Iranian population, alpha values were .78, .79, .76 and .72 for seeking social support, planful problem solving, positive reappraisal and accepting responsibilities respectively (Padyab, 2009). Only these four dimensions corresponding to effective ways of coping were included in our analysis. Only these four dimensions corresponding to effective ways of coping are included in our analysis. Seeking social support, planful problem solving, positive reappraisal and accepting responsibilities are more likely to associate with a good mental health status

(Folkman & Moskowitz, 2004). In light of this, we will focus on these four sub-scales for the work at hand.

The *Quality of Life* (WHOQOL-BREF, 1996) consists of 26 items with a 5 point rating scale that ranges from 1 = very dissatisfied to 5 = very satisfied. The scale is made up of two general items and four sub-scales, that is psychological dimension (e.g. *are you able to accept your bodily appearance*), physical health dimension (e.g. *do you have enough energy for everyday life*), environmental dimension (e.g. *how healthy is your physical environment*) and social relationship dimensions (e.g. *how satisfied are you with your personal relationship*). The WHOQOL-BREF has been validated across many cultures, for example Rocha, Power, Bushnell, and Fleck (2012) carried out a cross-cultural validation consisting of 6 different countries. Equally, the creation and validation of this instrument did include sample from many different cultural background as an attempt to guarantee its cultural stability functioning (Skevington, Lotfy, & O'Connell, 2004). The first two items on this instrument aim at seeking general information on health. While the psychological, physical and environmental dimensions were included in the evaluation of the model, the social relation domain was used only in descriptive and multivariate statistics. In substance abused population, the instrument has been validated in Thailand with alpha values as follows .79, .78, .76, .87 for physical health, psychological health, social relations and environmental domains respectively (Fu et al., 2013).

Data analysis

With the help of descriptive statistics, socio-demographic information of the sample is been described as shown in Table 1. Also the mean scores and standard deviations of each sub-scale are calculated and associated with some of the socio-demographic variables such as gender, length of stay in the host country and marital status. Furthermore, with the help of multivariate analysis (MANOVA) gender and marital status was computed against the quality of life and coping. Assuring the validity and the internal consistency, each sub-scale instruments was subjected to Cronbach's alpha calculations and factorial analysis. Factorial analysis uses, component analysis with varimax rotation approach. Evaluating the predicting power of coping and social support

on the quality of life, structural equation modeling was performed. All analysis were done with the used of SPSS 17 and Mplus-5.

Effect sizes were reported when possible. For the *t* test statistics, the effect sizes were reported as *d*-statistics. That is, *d* values above .20 are considered to be small, values above .50 are considered to be medium and those above .80 are large (Cohen, 1992).

Validating the Data Collection Instruments

Factorial Validity of the Ways of Coping Questionnaires (WCQ)

Four dimensions were considered for this study. The overall variance for the dimensions chosen was 81%. Items loaded to positive reappraisal with minimum variance of 55% and maximum of 75%. For the planful problem solving dimension, the minimum variance was 51% while maximum was 69%. Seeking social support items produces a minimum variance of 58% and maximum of 85%. For the dimension of accepting responsibilities, items loaded with a minimum variance of 54% and maximum of 80%. Results are shown in Table 2.

Internal consistency

With the help of Cronbach's alpha, we established the reliability of the instrument. The alpha coefficient values stood as .76 for positive reappraisal, .70 for accepting responsibilities, .79 for seeking social support and .71 for planful problem solving. The overall alpha coefficient stood at .83. Details results are shown in Table 2.

Table 2

Reliability and factorial structure of WCQ

Seeking social support (Alpha = .79)	F1	F2	F3	F4
8. Talked to someone to find out more about the situation	.61			
18. Accepted sympathy and understanding from someone	.58			
22. I got professional help	.55			
31.Talk to someone who could do something concrete about the problem	.63			
42. I ask a relative or friend I respected for advice	.75			
45. Talk to someone about how I was feeling	.85			
Positive reappraisal (Alpha = .76)				
20. I was inspired to do something creative		.60		
23. Change or grew as a person in a good way		.52		
30. I came out of the experience better than when I went in		.73		
36. Found new faith		.62		
38. Rediscovered what is important in life		.70		
56. I change something about something		.75		
60. I prayed		.56		
Planful problem solving (Alpha = .71)				
1. Just concentrate on what I had to do next-next step			.64	
26. I made a plan of action and followed it			.51	
39. Changed something so things would turn out all right			.61	
48. Drew on my past experience, I was in a similar situation			.69	
49. I knew what had to be done, so I doubled my efforts to make things work			.52	
52. Came up with a couple of different solutions to the problem			.55	
Accepting responsibilities (Alpha = .70)				
9. Criticized or lecture myself				.54
25. I apologized or did something to make up				.62
29. Realized I brought the problem on myself				.59
51. I made a promise to myself that things would be different next time				.80
Total Alpha = .83				

Factorial Validity of the Multidimensional Scale of Perceived Social Support (MSPSS)

Base on factorial analysis, component and varimax rotation approach, a simplify structure of MSPSS was obtained. With this approach, three dimensions were confirmed (support from friends, family members and significant others) with 48.4% of total variance explained. In the support from friend's dimension, all items loaded with a minimum variance of 55% and maximum of 63%. From the part of family members support, a minimum of 53% and maximum of 71% was recorded for items loading. For the support of significance people, items loaded with 52% minimum and 68% maximum. Details results are presented in Table 3.

Internal consistency

The internal consistency (Cronbach's alpha) for MSPSS was good and acceptable for all the three subscales. An alpha value of .70 was obtained for support from friends, .72 for support from family members and .71 for support from significant people. The alpha value for the whole instrument stood at .79 thus making it reliable for data collection. The results of the total and subscale alpha values are found in Table 3.

Table 3
Reliability and factorial structure of MSPSS

Support by friends (Alpha = .70)	Factor 1	Factor 2	Factor 3
6. My friends Really try to help me	.57		
7. I can count on my friends when things go wrong	.55		
9. I have friends with whom I can share my joys and sorrows	.61		
12. I can talk about my problems with my friends	.63		
Support by family (Alpha = .72)			
3. My family really helps me		.54	
4. I get the emotional help and support I need from my family		.63	
8. I can talk about my problems with my family		.53	
11. My family is willing to help me make decisions		.70	
Support by other significant people (Alpha = .71)			
1. There is a special person who is around when I am in need			.61
2. There is a special person with whom I can share my joys and sorrows			.52
5. I have a special person who is a real source of comfort to me			.59
10. There is a special person in life who cares about my feelings			.68
Total (Alpha = .79)			

Factorial Validity of the Quality of Life Questionnaire (WHOQOL-BREF)

The quality of life items were classified into various sub-scales with the help of factorial component analysis, using varimax rotation approach. Base on this, the three dimensions that are included in the analysis were filtered out. That is, psychological, physical and environmental sub-scale. The total variance explained by these dimensions in the whole instrument stood at 59%. The psychological sub-scale items loaded with a minimum variance of 52% and maximum of 68%. On the physical sub-scale, items loaded with a minimum variance of 54% and maximum of 63% while on the environmental sub-scale items loaded with minimum variance of 56% and maximum of 71%. Results are presented in Table 4.

Internal consistency

With the help of Cronbach's alpha calculations, the internal consistency of the WHOQOL-BREF was good and acceptable. When the psychological sub-scale was subjected to this calculation, an alpha value of .82 was obtained. Similarly, the physical

health sub-scale produces an alpha value of .85 while the environmental sub-scale yields an alpha value of .86. The total alpha values for the whole measurement scale stood at .85 thus making the instrument suitable for data collection and analysis in refugees and asylum seekers sample. Results are indicated in Table 4.

Table 4

Reliability and factorial structure of WHOQOL-BREF

Physical health (Alpha = .85)	F1	F2	F3
3. To what extend do you feel that your physical pain prevents you from doing what you need to do	.54		
4. How much do you need any medical treatment to function in your daily life	.57		
10.Do you have enough energy for everyday life	.56		
15. How well are you able to get around	.60		
16. How satisfied are you with your sleep	.59		
17. How satisfied are you with your ability to perform your daily living activities	.54		
18. How satisfied are you with your capacity to work	.63		
Psychological health (Alpha = .82)			
5. How much do you enjoy life		.52	
6. To what extend do you feel your life to be meaningful		.58	
7. How well are you able to concentrate		.67	
11. Are you able to accept your bodily appearance		.65	
19. How satisfied are you with yourself		.59	
26. How often do you have negative feelings such as blue mood, despair, anxiety, depression		.68	
Environment (Alpha = .86)			
8. How safe do you feel in your daily life			.71
9. How healthy is your physical environment			.56
12. Have you enough money to meet your need			.55
13. How available to you is the information that you need in your day-to-day life			.63
14. To what extend do you have the opportunity for leisure activities			.58
23. How satisfied are you with the conditions of your living place			.62
24. How satisfied are you with your access to health services			.59
25. How satisfied are you with your transport			.69
Total Alpha = .85			

Results

Relationship of WHOQOL-BREF sub-scale scores with demographic variables

Gender. Base on gender, female refugees scored high in the social relationship dimensions as compared to male participants. This goes in line with the expectation, although the males participants outweighed the females in sample size comparison. This difference was significant with d = .35 as effect size value. Equally, the males participants rated their quality of life with a much higher score than the females participants. This maybe directly related to a bigger n for males than females. Base on health status, males indicated that they were more satisfied with their health as compared to females. Although this differences in scores was small. The physical health sub-scale witness a higher and significant score for males as compared to females with d = .39. There was a slight difference in scores on the psychological sub-scale with females scoring lesser than males. In this dimension, there was no significant result hence a small effect size difference of d = .16. The environmental dimension produce a big difference in score which were higher and significant for males than females with an effect size difference of d = .36.

Marital status. When marital status was check against each sub scale, it shows that singles refugees reported a slightly good health and quality of life as compared to their counterparts. The social relationship dimension did favor the married refugees than their counterparts with significant difference and effect size of d = .31. Taking a look at the physical health and environmental sub-scales, there were no significant differences among the two groups. The psychological sub-scales produce higher scores for single refugees as compared to their counterparts. These differences were significant with an effect size of d = .33.

Length of stay in the host county. The length of stay in the host country was also considered to be an important demographic characteristic. The environmental and psychological sub-scared favored refugees who have stayed in the host country for long. The social and physical health sub-scale did produce mean differences when match with

length of stay in the host country. None of these interactions were significant. Detail results of the WHOQOL-BREF relationship with these demographic characteristics are presented in Table 5, 6 and 7.

Table 5

Relationship of WHOQOL-BREF sub-scale score with gender

	WHOQOL-BREF sub-scale scores					
Characteristics	*df*	*n*	*M*	*SD*	*t*	*d*
Quality of life rating						
1. Females	21	79	1.87	.77		
2. Males		141	2.10	.62		
General health satisfaction						
1. Females	26	79	1.88	.54		
2. Males		141	2.07	.76		
Social relations						
1. Females	26	79	3.87	.54	4.84**	.35
2. Males		141	2.01	.76		
Physical health						
1. Females	18	79	1.71	.67	4.50**	.39
2. Males		141	2.45	.88		
Psychological health						
1. Females	21	79	2.10	.52	1.01	.16
2. Males		141	2.81	.63		
Environmental situation						
1. Females	15	79	1.55	.43	4.68**	.36
2. Males		141	2.90	.87		

**$p < .01$ two tail testing

Table 6

Relationship of WHOQOL-BREF sub-scale score with marital status

	WHOQOL-BREF sub-scale scores					
Characteristics	*df*	*n*	*M*	*SD*	*t*	*d*
Quality of life rating						
1. Married	21	60	1.93	.87		
2. Single		141	2.66	1.01		
General health satisfaction						
1. Married	26	60	1.56	.67		
2. Single		141	2.01	.98		
Social relations						
1. Married	26	60	1.89	.51	1.01	.17
2. Single		141	2.87	.66		
Physical health						
1. Married	18	60	1.84	.97	1.51	.15
2. Single		141	2.33	1.02		
Psychological health						
1. Married	21	60	1.10	.62	4.01**	.34
2. Single		141	2.98	.81		
Environmental situation						
1. Married	18	60	1.79	.91	1.68	.18
2. Single		141	2.99	.83		

**$p < .01$ two tail testing

Table 7

Relationship of WHOQOL sub-scale score with length of stay in the host country

	WHOQOL-BREF sub-scale scores					
Characteristics	*df*	*n*	*M*	*SD*	*t*	*d*
Quality of life rating						
1. 6 months-3Y	21	85	2.56	.72		
2. 4 years and above		145	2.88	1.00		
General health satisfaction						
1. 6 months-3Y	26	85	2.33	.77		
2. 4 years and above		145	2.90	.80		
Social relations						
1. 6 months-3Y	26	85	2.44	.83	2.02	.19
2. 4 years and above		145	2.96	.94		
Physical health						
1. 6 months-3Y	18	85	2.31	.62	1.51	.15
2. 4 years and above		145	2.63	.85		
Psychological health						
1. 6 months-3Y	21	85	2.11	1.04	1.89	.20
2. 4 years and above		145	2.84	.71		
Environmental situation						
1. 6 months-3Y	17	85	1.99	.83	3.68	.24
2. 4 years and above		145	3.00	.67		

$^{**}p < .01$ two tail testing

Gender and marital status on WCQ sub-scales

One way MANOVA was performed to assess the mean effect of gender on all sub-scale scores of WCQ. There was significant interaction effect for gender, accepting responsibilities and seeking social support sub-scale (Roy's largest root = .04, F (2.27) = 3.38 $p < .05$). Univariate testing found the effect to be significant for seeking social support F (1.28) = 5.67; $p < .001$. Mean analysis indicated that females participants (n = 79) have the tendency of seeking social support as a means of coping with stress than males participants (n = 141). Still with the used of one way MANOVA, marital status was computed as the independent variable on all sub-scale scores of WCQ. The multivariate results were significant for marital status, Pillai's trace = .03, F = 3.30, df = (3.45), $p < .05$ thus indicating the difference between single and married refugees on the four sub-scale of WCQ. However, unvariate testing found no significant difference between married and single refugees on any of the ways of coping (WCQ) sub-scale total score. Thus single and married refugees were not significantly different in their ways of coping with psychological stress. Detail results are indicated in Table 8.

Table 8

Gender and marital status on WCQ sub-scales

Variables	Females *n*=79	Males *n*=141	Married *n*= 60	Single *n*=141	Effect on gender	Effect on marital status	Females vs males	Married vs single
	Mean (*SD*)	*Mean* (*SD*)	*Mean* (*SD*)	*Mean* (*SD*)	ANOVA	ANOVA	*d*	*d*
Positive reappraisal	2.19 (.88)	3.10 (1.04)	2.33 (.83)	2.84 (1.07)	.06	.24	.19	.13
Accepting responsibilities	1.89 (.76)	2.82 (.73)	2.98 (.64)	3.14 (1.31)	.08	.07	.17	.15
Planful problem solving	2.05 (1.01)	2.50 (.88)	2.10 (.72)	2.01 (.89)	.23	.18	.12	.11
Seeking social support	(3.10) (.81)	2.01 (1.05)	2.08 (.61)	2.72 (.78)	.00*	.13	.31	.16

*$p < .05$

Gender and marital status on WHOQOL-BREF sub-scales

With the help of one way MANOVA, the interaction effect of gender and marital status with the total scores of the four sub-scales for quality of life were assessed. When gender was computed as a dependent variable against the total score of quality of life sub-scales, it showed a significant multivariate effect for the four independent latent variables as a group (Roy's largest root = .05, F (2.29) = 4.12 $p < .05$). Furthermore, when a follow up unvariate analysis was conducted, it turns out that gender indeed only interacted significantly with social relations (F (3.23) = 6.57; $p < .001$). Equally, when marital status was check against the total score of all the WHOQOL-BREF sub-scale, it yielded significant multivariate effect (Pillai's trace = .05, F = 3.79, df = (2.33), $p < .05$). However when this interaction effect was univariately checked, none of these interactions were significant. Details results are shown in Table 9.

Table 9

Gender and marital status on WHOQOL-BREF sub-scales

Variables	Females *n*=79	Males *n*=141	Married *n*= 60	Single *n*=141	Effect on gender	Effect on marital status	Females vs males	Married vs single
	Mean (*SD*)	*Mean* (*SD*)	*Mean* (*SD*)	*Mean* (*SD*)	ANOVA	ANOVA	*d*	*d*
Social relations	3.18 (.75)	2.00 (1.00)	2.66 (.73)	2.88 (.89)	.00*	.23	.25	.10
Physical health	2.09 (.82)	2.95 (.93)	1.87 (.75)	2.14 (.82)	.06	.09	.13	.19
Psychological health	2.23 (.99)	2.88 (1.11)	2.09 (.81)	2.31 (.87)	.23	.16	.15	.12
Environmental conditions	(2.10) (.66)	2.79 (.85)	2.33 (.77)	2.76 (.93)	.07	.18	.11	.10

*$p < .05$

Inter-measure correlation

In other to assess the inter-relationship among all sub-scale, correlation was performed. Base on Cohen correlation assessment criteria, correlations above .10 are considered

small, while correlations above .30 are considered medium. At the same time, correlations above .50 are considered large (Cohen, 1988). Base on this, all our correlations values lie between small and medium effect size with significant level at .01 and .001. As can be observed from table 10, some sub-scales are not totally independent from each other. For example, seeking social support in ways of coping and family in social support present a high correlation value of .40.

Table 10

Inter- correlation of WHOQOL-BREF, WCQ and MSPSS sub-scales

Construct		1	2	3	4	5	6	7	8	9
1	FR									
2	FA	.39***								
3	S O	.34***	.34***							
4	P R	.19**	.25***	.28**						
5	AR	.21***	.20**	.23***	.36***					
6	SSS	.40***	.39***	.37***	.31***	.29***				
7	PPS	.27***	.19**	.24***	.29**	.27**	.21***			
8	PhH	.22**	.23**	.17***	.27***	.16**	.23**	.38***		
9	PH	.27**	.29***	.18**	.37***	.23***	.31***	.19***	.29***	
10	EM	.20**	.26***	.28***	.19**	.24**	.18**	.22**	.31***	.27***

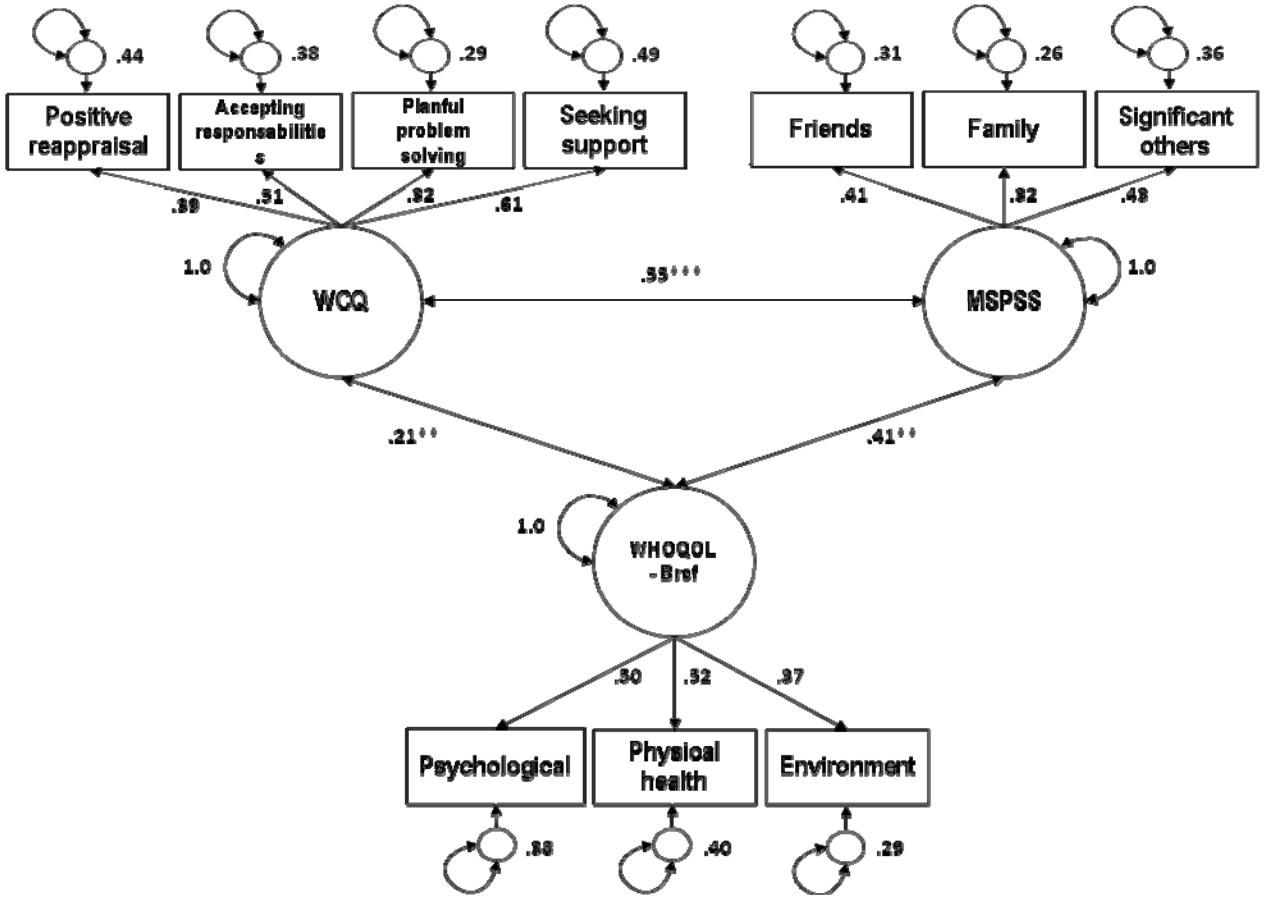
***$p < .001$ **$p < .01$ Two tail testing.

Legend: Multidimensional Scale of Perceived Social Support (MSPSS): FR = Friends, FA = Family, SO = Significant others; Ways of Coping Questionnaires (WCQ): PR = Positive Reappraisal, AR = Accepting Responsibilities, SSS = Seeking Social Support, PPS = Planful problem solving ; World Health Organization Quality of Life-BREF (WHOQOL-BREF) PhH = Physical Health; PH = Psychological Health; EM = Environmental.

The predicting power of social support and coping on quality of life

As recommended by Kline (1998), the testing of a latent regression model fits needs to begin by performing Confirmatory Factor Analysis (CFA). With this, we are able to tell the power of each relationship in all the specified paths. In this study, all indicated paths correlated positively and significantly. That is, the path with social support predicting

coping yields a correlation of $r = .55$, $p < .001$. At the same time, social support and coping correlated with quality of life at $r = .41$ $p < .001$ and $r = .21$, $p = < .001$ respectively. However, the CFA model did not fit well to the data with the following fit indices CFI = .90, RMSEA = .10, SRMR = .04. As an attempt to identify some possible factors that may have caused this misfit, possible solutions are discused in annex 6. The CFA model is presented in Figure.1 with fit indices in Table 11.



***$p < .001$

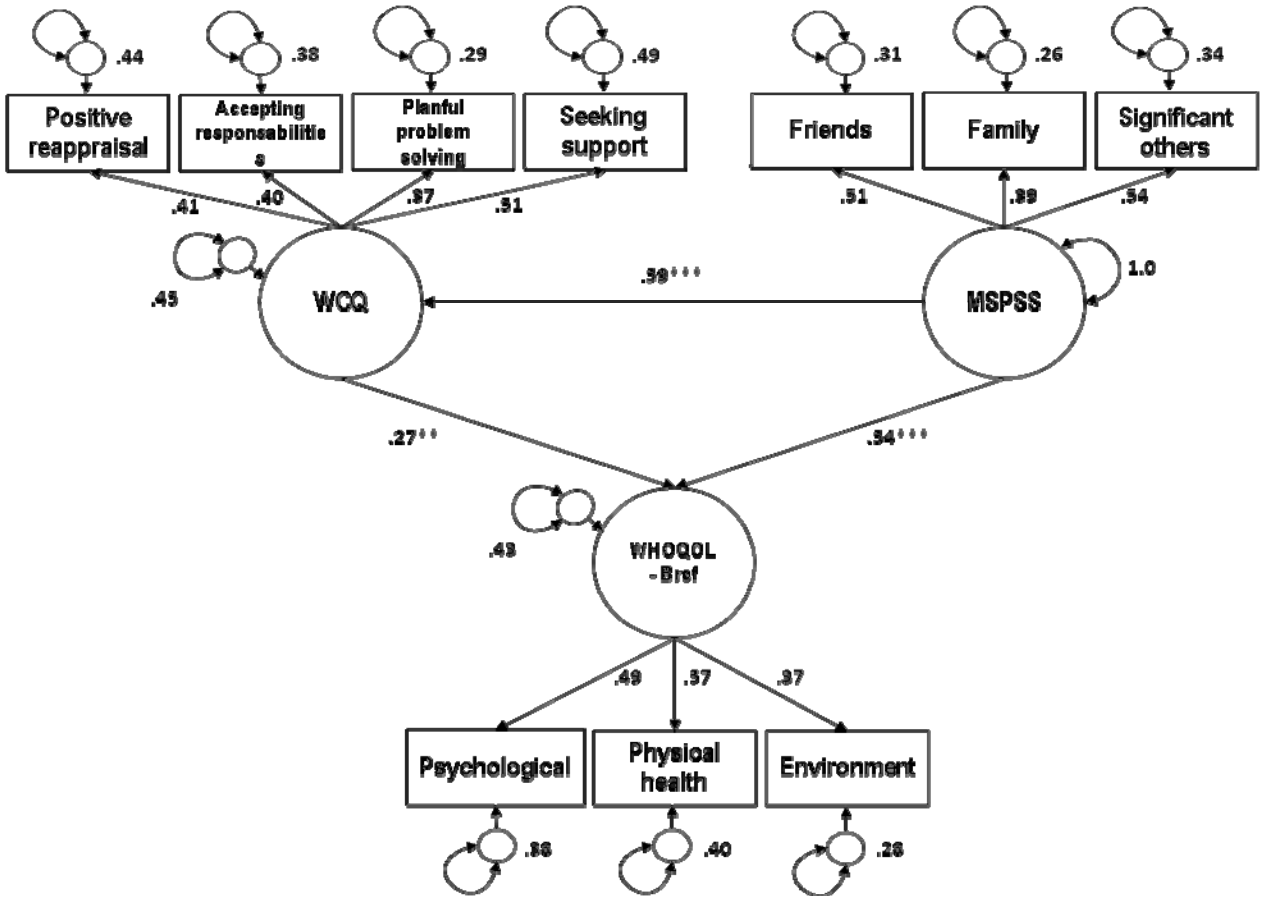
Figure 1. Confirmatory factor analysis (CFA) for the constructed model at (N = 221).

Table 11

Overall model fit indices

Model fit indices	Results	Recommended Values (Kline,1998)
CFI	.90	≥ .90
RMSEA	.10	< .05
SRMR	.04	< .08

Base on the study hypothesis (Table 12), indicated paths were specified and computed. As expected, all the specified paths loaded positively and significantly. That is, social support significantly predict coping at $\beta = .59$ $p < .001$. Equally, social support and coping significantly predict quality of life at $\beta = .54$ $p < .001$ and $\beta = .27$ $p < .001$ respectively. Unfortunately, the evaluated latent model did not fit well to the data with fit indices as follows: CFI = .93, RMSEA = .10, SRMR = .04. Based on this bad fit, some possible causes and solutions are discussed in annex 6. The tested model is presented in Figure 2 with fit indices in Table 9.



$^{**}p < .01$ $^{***}p < .001$

Figure 2. Latent structural regression model (SR) evaluated at (N = 221)

Table 12

Overall model fit indices

Model fit indices	Results	Recommended Values (Kline, 1998)
CFI	.93	≥ .90
RMSEA	.10	< .05
SRMR	.04	< .08

Discussion

The present study attempted to investigate the interaction effect of socio-demographic variables such a gender, marital status and length of stay in the host country with coping and quality of life among refugees and asylum seekers. At the same time, the study assessed a structural latent model where social support and coping are acting as predictors of quality of life among refugees and asylum seekers. While the previous took a multivariate approach, the latter proceeded with the help of structural equations modeling. The multivariate checking of gender against all the sub-scale of ways of coping did indicated that indeed there exists an interaction effect among the variables. However, a follow up unvariate *F* testing yields significant results only for gender and seeking social support sub-scale. Marital status and sub-scales of ways of coping did yields a significant interaction effect at the multivariate level, although none of these interactions were significant at the univariate follow up level. The predicting power of social support and coping on quality of life was evident in the latent structural equation model. Contradicting our expectations, the model did not fit to the data.

The finding from this study goes in line with calls for the consideration of socio-demographic variables in dealing with coping in general then among refugees and asylum seekers in particular. For instance women have the tendency of using emotional coping strategies than men in general (Matud, 2004). However these coping strategies maybe combined with problem focus depending on the stressful situation (Herman-Stahl, Stemmler, & Petersen, 1995). Among refugees, gender has been found to play a role in coping, for instance women tend towards indoor and family as a way of coping while men turn towards outdoor activities for coping (Renner & Salem, 2009). Female gender problem focus and avoidance coping strategies predict PTSD (Elklit, Kjae, Lasgaard, & Palic, 2012). The uniqueness in our study comes from the multivariate approach which indeed was significant but only with seeking social support as a way of coping at the univariate level. Marital status as a demographic variable was also considered in this study. Marital status has been reported to be playing a role in coping with stress among refugees and asylum seekers. For example, being single have been associated with

external coping (Plante, Simiciv, Andersen, & Manuel, 2002). In another study, marital status was found to be playing a security protective coping role to women than men (Aseyo & Ochieng, 2013). In this present study, marital status was indeed evident at the multivariate level with the total score of the four sub-scales of ways of coping (seeking social support, positive reappraisal, planful problem solving and accepting responsibilities). However, a follow up univariate testing did not confirm any effect for each sub-scale.

The results from this study showed that gender and marital studies forms important demographic variable when it comes to quality of life among refugees and asylum seekers. First, gender interacted significantly with social relations, physical health, and psychological health and environmental concerned. This interaction was evident at the multivariate level with all the four sub-scales of quality of life. However at the univariate level gender did align significantly only with social relations with female scoring slightly higher than males. Although gender has also been reported in other studies, most reports deviate from the findings from this study either by methodological approach or by results. For example, female gender has been found to be associated with lower quality of life in general among refugees (Von–Beutel, Decker, & Brähler, 2007). Similarly, female gender has been found to be associated with low quality of life especially as far as psychological health is concerned (Sundquits, Behmen-Vincevic, & Johnson, 1998). Although in our studies, there were slightly mean differences for each quality of life sub-scale matched with females and males, these differences were not significant. For instance, males scored slightly higher than females in psychological health, physical health and environmental concern while females significantly scored higher in social relations. Marital status as a demographic characteristic was multivariatly check against all sub-scale of quality of life. In this study, the marital status was only significant at the multivariate level, this significance failed to replicate itself at a follow up univariate testing. In other studies, though with a different methodological approach marital status have been found to be playing a role in quality of life among refugees, that is married refugees reported better psychological health than their counterparts (Eriksoon-Sjöö, Cederberg, Östman, & Ekblad, 2012). Still among refugees and asylum seekers, there have been good findings proving the association of psychological health and marital

status (Daher, Ibrahim, Daher, & Anbori, 2011). In this study, mean analysis demonstrated superiority of all sub-scale of quality of life for single participants over married participants. In light of this, marital status remains an important variable to be further exploited among refugees and asylum seekers. A study that takes into consideration the marital status of refugees and asylum seekers does so as an additional advantage (Giacco, Matanov, & Priebe, 2013). This is so because such studies will lead to well adapted therapeutic approaches (Vaage et al., 2010).

The relationship that exists between social support, coping and quality of life was evident in the confirmatory factor analysis model. These relationships were positive and significant although with bad fit indicies. The results from the latent structure regression model indicated that social support and coping are indeed good predictors of quality of life among refugees and asylum seekers. The findings from this study do not deviate from other findings and literature elsewhere. Although there was evidence of bad fit in the model social support and coping have been found to be associated with good quality of life among refugees (Ghazinour, Richter, & Eisemann, 2004). However, this study took a more univariate approach which may leads to lose of important information. Our study became unique in the sense that it took a multivariate approach, so the predicting power of social support and coping on the quality of life was simultaneously obtained even if our model did not fit enough to the data. In another study, social support was found to increase the quality of life of refugees (Matanov et al., 2013). Similarly, with a univariate approach, coping and social support were found to be good predictors of good wellbeing among refugees (Sulaiman-Hill & Thompson, 2012). The predicting power of coping and social support on the quality of life among refugees in this study was very interesting. Firstly, it gives us a more precise image of the role played by each predictor in the model. Secondly it tells us the extend to which social support itself is predicting coping. Thirdly it tells us if this model fit well to the data. This precise approach is essential not only as a recommendation but also as the first step in setting up proper intervention approaches (Teodorescu, Heir, Hauff, Wentzel-Larsen, & Lien, 2012). Objectively evaluated models have been found to be more successful in clinical applications than the non evaluated models (Kline, 1998). In light of this, the models from this study maybe a starting point

for further research in constructing various psycho-social approaches in an attempt to guarantee a good quality of life among refugees and asylum seekers.

Limitations and future directions

The first setback in this study maybe more methodological: firstly, the small sample size, secondly the unequal distribution of sample size among tested demographic variables may have brought in testing error and bias results. Here, the males outweighs the female participant by a great number which may have affected the comparison of the two be it at univariate or multivariate level. If resources and time are available, a large and equal distribution of sample size is usually preferable (De winter, 2013). However, in case of extreme scenarios especially in social science research a small and an unequal sample size maybe used with the acknowledgment of measurement errors that may arise (Bern, Utts, & Johnson, 2011). From another perspective, a small sample size may not surprisingly produce faulty results as some of the test were developed mainly for small sample size, for example the t-test (Lehmann, 2012). This therefore means that, once the distribution of the sample size is tested or assume to be normal, the generated statistical results from such sample may also be considered to be trustworthy (Elliot & Woodward, 2007). As an approach to keep the sample size problem to rest, future study needs to put more resources as much as possible in recruiting a good number of participants. A future longitudinal approach may also prove necessary since it can help in checking for results stability over a period of time.

The inter measure correlation that were found in this study were significant, satisfactory but not the best. Base on Cohen's (1988) approach, none of the correlation coefficient value did cross the medium effect size level. Although this may signal the inter-dependency of each measure to another, it may also cast doubt on the relationship that exists between the measures. This correlation issue may not be link to the diverse cultural population background but maybe directly related to the questionnaires used. First, only WHOQOL-BREF measures are found in English and French. The WCQ and MSPSS measures were translated from English to French, since the French version did not exist at the time of the study. Secondly data collected in French was jointly analyzed with the one collected in English without any congruence evaluation between the two. This was

because, the *n* difference between the data collected in French and English was big so much such that any validation could not be done separately. In line with this, achieving semantic equivalence could be difficult giving rise to heterogeneous endorsement of items. In future, it will be recommended to collect as much data as possible with the English and French versions of WCQ and MSPSS and validate them separately before globally. Finally, the bad fit produced by both CFA and SRM remains a problem for this study. Based on this fact, some possible explainations and solutions are proposed in annex 6.

Study implications

The findings from this study indicate the need of a well adapted and precise psycho-social therapy for refugees and asylum seekers. First, it is evident that socio-demographic variables are playing a big rule in shaping coping and quality of life among refugees and asylum seeker. Precisely, gender and marital status needs to be considered when setting up various intervention approaches aimed at assisting refugees and asylum seekers to cope with stress and live a good quality of life. Gender and marital status maybe playing a more leading role in the way refugees manage stress and live than we may have previously thought (Von–Beutel et al., 2007). In relation with this, a gender and marital status oriented therapy maybe successful. Well adapted coping and social support do raise the quality of life among refugees (Ghazinour et al., 2004). It has been evident in this study that social support and coping are indeed good predictors of quality of life among refugees and asylum seekers. Apart from psycho-social therapy, psychological training maybe necessary in teaching refugees the various techniques in improving their level of social support and adaptive ways of coping with stress. Murray, Davidson, and Schweitzer (2010) call for psycho-educational and community base intervention approach in dealing with stress related disorders among refugees. This type of technique has been found to be successful elsewhere in student population (Baqutayan, 2011). Also teaching and providing young military recruit with external social resources yields a positive impact on their ways of coping with stress (Overdale & Gardner, 2012). Furthermore, since family form the bases of social support in one part, training within family among refugees maybe encourage. This is so because a sound and proper

psychosocial behavior among adults and youth refugees depends more on their families (Weine, 2011). American Psychological Association (2009) task forces recommended family approach therapy that could help in identifying various resources used by family refugees in coping with stress. This type of family therapy will help refuges to learn from their past experience, reduced their negative emotions attached to it and thus established equilibrium which enhances a sense of well-being among family members (American Psychological Association, 2009). As all these approaches will directly influence the way refugees and asylum seekers cope and their level of social support, therefore a good quality of life will be evident among this vulnerable population.

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Part 3

General Discussion

Part 3 of this work consist of chapter 8 and Chapter 9. Chapter 9 is dedicated to the systematic review of available literature on the treatment approaches of stress related disorders among refugees and asylum seekers. In Chapter 9, the synthesis of the findings aimed at bridging the gap between theory and practice is narrated.

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Chapter 8

Treatment of Stress Related Disorders in Refugees and Asylum Seekers: Literature Review, Setbacks and Innovative Propositions

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Article

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Abstract

Up to date, seven studies have reviewed literature on the treatment of stress related disorders among refugees and asylum seekers. Though one of the studies did acknowledge the need to expand the indicators used for the treatment, none have laid emphasis on the consideration of socio-demographic variables in the therapeutic process. There is therefore a need to review various treatment approaches such as to make innovative propositions to health practitioners. We systematically review a good number of studies through electronic data base such as Psych-INFO, Pub-Med, Medline and other reference journals. Thirty studies were included in the analysis. A good number of treatments took the form of cognitive behavioral therapy (CBT) followed by multidisciplinary treatments approaches. A few such as psychoactive medications, social support, music therapy, narrative exposure and multimodal therapy were also reported. While treatment indicators were PTSD, depression and anxiety, one study make used of quality of life and none make used of coping. Most of the treatment did ignore socio-demographic characteristics. The result shows that, most of the treatment approaches have failed to embrace the called for more indicators in the treatment of stress related disorders. Findings are discussed in the context of stress and coping among refugees and recommendation are made with the help of lessons learn from on going research in the treatment of stress related mental disorders.

Keywords: Refugees, asylum seekers, indicators, PTSD, treatment, depression, anxiety

Introduction

Refugees and asylum seekers present a high degree of comorbidity and their symptoms in most cases outweigh the diagnostic criteria for Post-Traumatic Stress Disorders (PTSD) (Sternmark, Guzey, Elbert, & Holen, 2014). In light of this, there have been a growing concern on the type and effectiveness of therapy refugees and asylum seekers are subjected to as a means of relieving them from stress related disorders. These groups of patients in most cases are often difficult to treat in part due to their cultural differences, language barriers and difficult living conditions (Hjemdal, 2006). Equally, demographic characteristics such as gender, marital status and length of stay in the host country have been found to be playing their own share in determining the ways of coping with stress among this vulnerable population (Renner, 2009; Elklit, Kjae, Lasgaard, & Palic, 2012; Ndzebir, Lemétayer, & Schiltz, 2014c). All these put a lots of treatment approaches into jeopardy with some studies putting the treatability of stress related disorders among refugees and asylum seekers in doubt (Carlsson, Moternsen, & Kastrup, 2005). There have been lots of treatments out come inconsistency among this group. In most cases, either the treatment outcome is moderately effective, not stable or non effective at all. In treatment outcomes, some individuals respond well to treatment while their counterparts show little or relapse of symptoms or no improvement in their symptoms (Halvorsen & Sternmark, 2010; Hinton et al., 2005). Although the type of therapy in this situation is very important. In a pilot study with a refugee sample, the psychiatric treatment they received did not yield any significant outcome hence was not effective (Jamil & Ventimiglia, 2010). Cognitive processing therapy has been proven to relived symptoms of PTSD among refugees (Schulz, Resick, Huber, & Griffin, 2006). In another study, Narrative-Exposure Therapy (NET) was compared with Treatment As Usual (TAU), findings from this study suggested a moderate effective performance of NET over TAU in reducing PTSD among asylum seekers (Neuner et al., 2010). Cognitive behavioral therapy (CBT) and exposure therapy E was found to reduce PTSD symptoms among refugees at 53% and 48% rate respectively (Paunovic & Öst, 2001). CBT combined with pharmacotherapy provided beneficial evidence in reducing PTSD among refugees (Otto et al., 2003). Elsewhere, Palic and Elklit (2011) carried out a systematic literature

research and came up with 25 different studies that tested the effectiveness of stress related disorders treatment ranging from CBT forms, alternative to multidisciplinary treatment approaches. There was an upper hand for CBT effectiveness outcome as compared to Alternative and multidisciplinary treatment outcomes (Palic & Elklit, 2011). This review, though broad in nature considered only psychosocial treatments approaches. With a handful of intervention approaches, many health professionals are left wondering why their effectiveness is not uniform and which innovative approaches can be used. A multitude of studies do focus on the treatment of PTSD while accepting that, post-migration stressors encountered in the host country do maintain and aggravate PTSD symptoms and thus influence their treatment outcome (Ryan, Kelly, & Kelly, 2009; Steel et al., 2009). While Post-traumatic Embitterment Disorders (PTED) has been found to be frequent in vulnerable (unemployment, injustice etc) populations, (Linden, 2003), only one study have evaluated PTED among asylum seekers (Ndzebir, Lemétayer, & Shiltz, 2013). No treatment of PTED among refugees and asylum seekers have been reported or at least published up to date.

This present paper reviews the psychological and psycho-pharmacological treatment outcome of stress related disorders among refugees and asylum seekers. The main objective is to spell out what has been proven to work and what did not work as an intervention approach. Secondly, the review also checks on which of the refugee's socio-demographic characteristic have been considered during each intervention and which stress related disorders indicators are used. Finally the review will make innovative proposition. There exist systematic reviews of literature that focus on psychotherapy treatment (Nicholl & Thompson, 2004), cognitive behavioral treatment outcome (Cloitre, 2009), psychological treatment (Nickerson, Bryant, steel, & Silove, 2011), psychosocial treatment outcome (Palic & Elklit, 2011), narrative versus prolong exposure treatment outcome (Morkved et al., 2014) and psychosocial versus pharmacological treatments (Slobodin & de Jong, 2014). Narrative exposure versus treatment as usual has also been reviewd (Halvosen, Stenmark, Neuner, & Nordhal, 2014). None of these reviews did include characteristics that are considered to be affecting treatment outcome such as gender and marital status. Non have deeply questions the choice of stress indicators used.

Although Palic and Elklit (2011) suggested that treatment has been too focus on PTSD and related disorders.

In other to give a broad overview of available quality studies, the study at hand make used of a broader inclusion criteria. This was equally an attempt to make sure that all aspect of stress related disorders treatment outcome are included.

Method

Treatment that uses psychosocial approaches and psychopharmacological either as a combination or as a sole method of treatment were included in the study. The designed of such studies should at least have pre and post-evaluation of stress related symptoms with standardized instruments. Equally, studies that proceeded by investigating the outcome of treatment by taking into consideration socio-demographic characteristics such as gender and marital status were also of interest for the work at hand. Similarly, studies where the treatment outcome was check through quality of life or through the general measure of mental well being were also included. Review studies, single cases and none experimentally approach studies were excluded from the review. After proper consideration of all these inclusion/exclusion criteria, a form was design and used through out the inclusion and elimination process of the article search. The form is shown in Box 1.

Box 1

Form used for selection and classification of articles

Reviewer:	Student Psychologist (SP) Assistant Student Psychologist (ASP)
Title of paper:	
Authors:	
Year of publication:	
Does the study fulfill the inclusion criteria?	
Do the study deals with treatment of stress related disorders?	Yes No
Is the population of study refugees or asylum group?	Yes No
Is there any pre and post treatment evaluation?	Yes No
Is the treatment outcome evaluated at least by standardized measure?	Yes No
Does the study consider socio-demographic characteristic in treatment outcome?	
Is the treatment psychosocial, Pharmacological or the combination of both?	Yes No
Type of research:	Descriptive Experimental Survey
Is single case study or study with some reasonable sample size?	Yes No
Did the study use any standardized measure to evaluate the treatment outcome?	Yes No
How did asylum seekers and refugees respond to treatment?	Positive Negative Both

Searching process

The articles were searched by introducing a search term through one of the following computer data base: Psych-INFO, Pub-Med, Medline and other reference journals. Each specific search term as well as the number of articles that were recovered are indicated in Table 1. Once an article pop up from the search engine, the abstract and method used in the articles were read to determine weather it fits the inclusion criteria. Independent reviewers (SP, ASP) were contacted for consensus. In some cases, references were used from retrieved articles to locate them since they were not retrieved from the computer database. Only studies published in English and French were considered. The article search took place from 1 July 2014 to 30 of September 2014.

Table 1

Outcome of searched articles

Source	Number of studies retrieved
Search words	
Psych-info I. Treatment of stress among refugees	401 studies retrived
Psych-info II. Treatment of Posttraumatic stress disorder Among refugees & asylum seekers	50 studies retrieved
Pub med I. Treatment of stress related disorders among refugees	120 studies retrieved
Pub med II. Posttraumatic treatment with demographic characteristic consideration “Refugees”	10 studies
Medline I. Psychopharmacology and psychosocial treatment of refugees	201 studies
Medline II. Gender, Marital status and treatment outcome of stress in refugees	17 studies
Pilots I Psychotherapy and pharmacotherapy of posttraumatic stress disorders in refugees and asylum seekers	122 studies
Pilots II Treatment of stress in refugees	144 studies
Total number of studies retrieved *n*	1065
Total number of studies retain *n*	30

Extracting the data

The study proceeded by extracting information that describe the quality of study and the effect size of treatment. The demographic characteristics such as gender, marital status and length of stay in the host country etc were also included during the data extraction process. Cultural adaptation of each treatment was also taken into consideration during this process. The treatment centers (psychiatric center, detention, hosting etc) were also extracted. Indicators of each treatment such as, PTSD, depression, anxiety and quality of life were extracted but not limited. The type of stress considered for each treatment was also of interest to the study at hand.

Throughout the extraction process, studies that reported their original means and standard of deviation were used in calculating Cohen *d* effect size. Recalls that, base on Cohen assessment of effect size, a *d* values above .10 are considered small, while *d* values above .30 are considered medium. At the same time, *d* values above .50 are considered large (Cohen, 1988). In this case, there most be an experimental group and a control group implying that $d = M_1\text{-}M_2/\sigma_{\text{pooled, where}}$ σ_{pooled} = standard deviation.

For the quality of study, we used a subjective approach of evaluating it. That is, treatments that proceeded through experimental approach were considered to be of highest quality. Here there is the presence of treatment and control group. Sample sizes were also considered, for treatments with large sample size were judged to be more informing than the ones with small sample size.

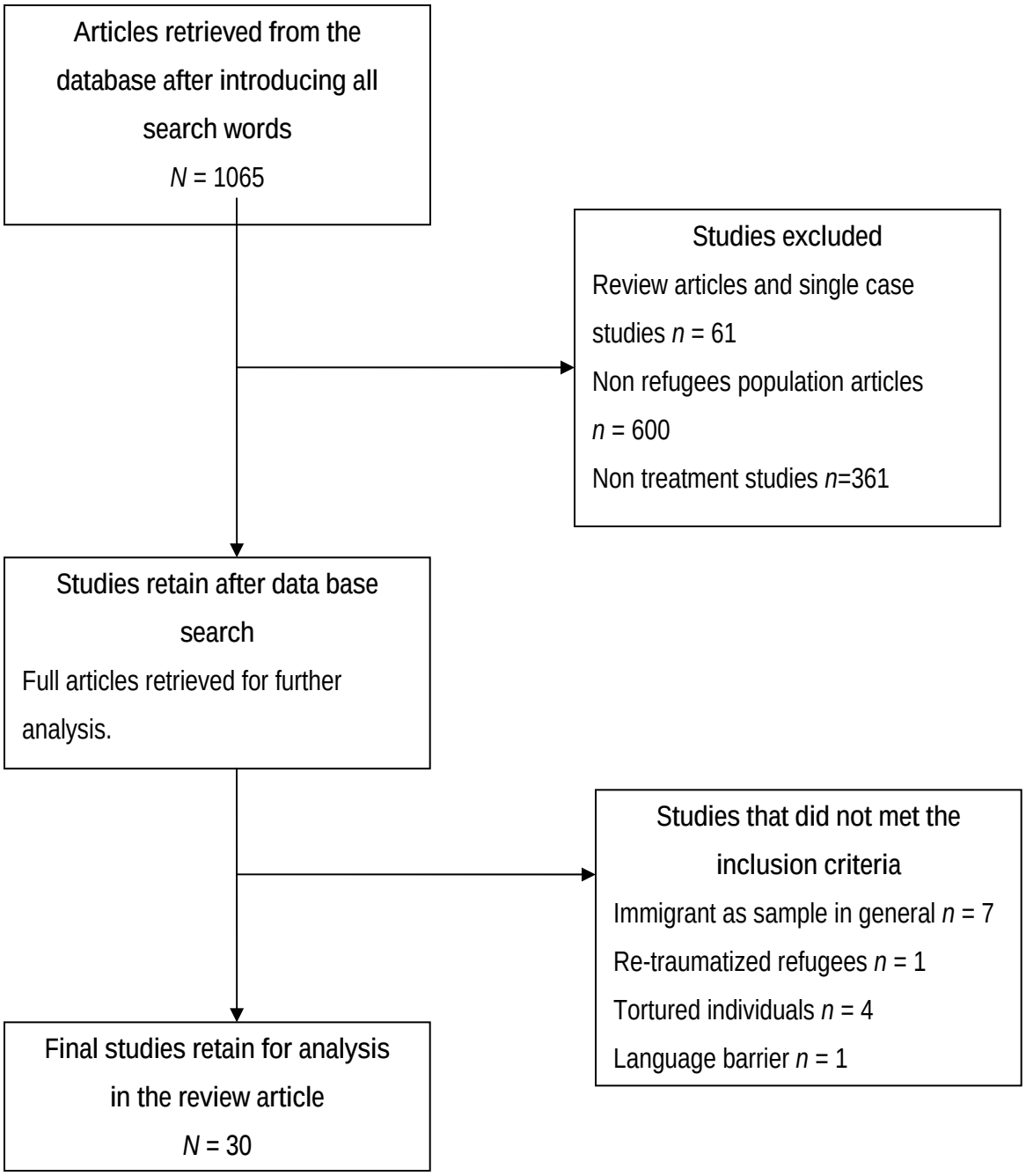

Figure 1. Flow diagram for articles selection.

Table 2
Details from studies included in the review

Reference	Type of study	Participants	Type of indicator	Type of treatment	Sensitivity	Outcome
Stenmark et al., (2014)	Pre & post test	54 refugees and asylum seekers	PTSD	Psychiatric and NET	Gender, offender status	Female benefited from treatment more than men
Drozdek et al., (2014)	Pre & post test	63 refugees	PTSD, anxiety & depression	Trauma focus multimodal & group therapy	NON	Symptoms relief with PTSD scoring the highest reduction
Jamil & Ventimiglia (2010)	Experiment-al	191 refugees 94 non refugees	PTSD & depression	Psychiatric	NON	Poor treatment response in refugee sample
Schulz et al., (2006)	Pre & post test	53 traumatized refugees	PTSD	Cognitive behavioral	NON	Symptoms of PTSD greatly reduced
Renner et al., (2012)	Experiment-al	63 refugees	Acculturation, depression, anxiety	Social support	Gender, country	Anxiety & depression reduce females & Afghan benefit
Arntz et al., (2013)	Pre & post test	10 refugees	PTSD depression	Imagery rescripting	NON	PTSD symptoms reduced
Akinsulure-Smith, (2009)	Pre & post test.	40 refugees & asylum seekers	PTSD & depression	Group therapy	Culture	Both PTSD & Depression symptoms reduce.
Paunovic & Öst, (2001)	Pre & post test	60 refugees	PTSD, anxiety quality of life depression	Cognitive behavioral & exposure	NON	The two treatments greatly reduced symptoms and increase quality of life.

Reference	Type of study	Participants	Type of indicator	Type of treatment	Sensitivity	Outcome
Hinton et al., (2009)	Pre & post test	24 refugees	PTSD	Cognitive behavioral	Culture	PTSD symptoms greatly reduced
Carlson et al., (2005)	Pre & post test	55 refugees	Anxiety, PTSD & depression PTSD	Psychiatric & psychological	NON	Multidisciplinary treatment did not help in symptoms relief
d'Ardenne et al., (2007)	Pre & post test	89 refugees	PTSD, depression & quality of life	Cognitive behavioral	NON	Improvement in quality of life and reduction in symptoms
Hinton et al., (2004)	Pre & post test	12 refugees	Depression & PTSD	Cognitive behavioral	Culture	Reduced depression and PTSD symptoms.
Muller et al, (2009)	Pre & post test	11 refugees	Depression & PTSD	Cognitive biofeedback	NON	Reduces pain but not PTSD and depression
Halvorsen & Stenmark, (2010)	Pre & post test	16 refugees	PTSD & Depression	Narrative exposure therapy	NON	Moderate reduction of PTSD and depression
Neuner et al., (2010)	Pre & post test	32 refugees	PTSD & depression	Narrative exposure therapy	NON	Depression and PTSD symptoms reduced
Schulz et al., (2006)	Pre & Post test	53 refugees	PTSD	Standard cognitive	NON	PTSD Symptoms reduced

Reference	Type of study	Participants	Type of indicator	Type of treatment	Sensitivity	Outcome
Holmquist et al., (2011)	Pre & post test	14 refugees	PTSD, depression	Psychodynamic	NON	Symptoms largely reduced
Hinton et al., (2005)	Pre & Post test	40 refugees	PTSD, depression	Cognitive behavioral	Culture	Effective in symptoms reduction
Neuner et al., (2008)	Pre & post test	277 refugees	PTSD & physical	Narrative exposure	NON	Symptoms greatly reduced
Neuner et al., (2004)	Pre & post test	40 refugees	PTSD, medical form	Narrative exposure	NON	Only PTSD symptoms reduced.
Cavic & Pejovic, (2005)	Pre & Post test	70 refugees	PTSD, anxiety & depression	Group cognitive behavioral	NON	Anxiety and depression reduced
Stenmark et al., (2013)	Pre & post test	81 asylum seekers & refugees	PTSD, depression	Narrative & psychiatric	NON	The treatment simultaneously reduce
Drozdek et al., (2012)	Pre & post test	56 refugees & asylum seekers	PTSD, anxiety & depression	Group therapy	NON	Use of trauma focus therapy in group reduces PTSD
Dybdahl, (2001)	Pre & post test	59 women refugees	PTSD	Psychosocial group	NON	Symptoms appears to be reduced
Folkes (2002)	Pre & post test	41 refugees	PTSD	Thought field therapy	NON	PTSD symptoms moderately reduced

Reference	Type of study	Participants	Type of indicator	Type of treatment	Sensitivity	Outcome
Otto et al. (2003)	Pre & post test	10 women refugees	PTSD & depression	CBT & psychiatric	NON	The combine treatment reduces symptoms
Kruse et al., (2009)	Pre & post test	35 refugees	Depression	Trauma focus psychotherapy	NON	PTSD and somatoform disorder symptoms reduced
Arcel et al., (2003)	Pre & post test	91 refugees	PTSD & depression	Psychiatric & psychological	NON	Symptoms greatly reduced
Brune et al., (2002)	Pre & Post test	141 refugees	Depression	Psychiatric & psychological	NON	Depression symptoms reduced
Akhtar (1994)	Pre & post test	10 refugees	PTSD, depression & anxiety	Musical therapy	NON	Symptoms reduced

Results

We concluded our search with 43 potential articles and 30 ended up fulfilling the inclusion pre-conditions. In Figure 1, the number of excluded studies and reasons for exclusion are stated out. One study of interest (Akinsulure-Smith, 2009) was also excluded from the review. Although the study fulfilled nearly all the conditions set up for inclusion, it fails in that it provided treatment to re-traumatized refugees. The other 4 potential studies dealt with treatment of stress among a mixed sample, that is tortured individuals of refugees background, prisoners, marginalized and vulnerable individuals. On this background, they were all excluded from the review. The 7 studies treated stress in immigrant population in general hence they were excluded from the final review. In light of this, 30 studies were included in the review.

The numbers of studies from each data base are indicated in Table 1. The flow diagram in Figure 1 shows a step-by-step procedure that was used in excluding studies that did not fulfilled the pre-condition set before hand. Pr-econditions associated with the included studies are details out in Table 2. In Table 3, the effect sizes of each treatment are calculated.

Sample size and nationality of participants

In this review, sample size ranges from 10 (Otto et al., 2003) to 285 (Jamil & Ventimiglia, 2010). Must studies make used of subjects between 30 and 65. Some studies included ex-Yugoslavia sample (10 studies) while Afghan and Iraqi refugees were group in another studies (5 studies). A handful of studies dealt with refugees from a mixed population background (11 studies). Equally, 2 studies were carried out with African refugees. The samples for the remaining studies were group as refugees with an Asian origin. The grouping of refugees by country is important since it is evidence that treatment maybe culturally influence. That is, some treatment approaches may work well in refugees from some countries and may not work in refugees from other countries. For example, culturally sensitive cognitive behavioral therapy was found to be effective in Asian refugees than the cognitive behavioral therapy in it its pure state (Hinton et al.,

2009). Also, treatment that focus on group work maybe beneficial for refugees with African origin (Akinsulure-Smith, 2010).

Clustering various treatments

Referring to the extracted data, reviewed treatment were group into various categories base on their treatment approaches. The larger numbers of treatment were Cognitive Behavioral Therapy (CBT) in nature. There are 6 studies that make used of CBT and 4 that combined CBT with other forms of treatment such as biofeedback and group therapy. Out of these, 3 of them make use of culturally adapted CBT. See Table 2 for references. Equally, 5 studies fall under multidisciplinary treatment. Here the studies make used of combine approaches for the treatment of stress related disorders. That is, treatments with some sort of psychotic medications combine with trauma focus therapy, narrative therapy or simply psychotherapy. Elsewhere, narrative exposure therapy consisted of 4 studies while trauma focus had 2 studies. Also, there was one treatment just in form of social support, music therapy, and psychodynamic therapy. Details of these studies are shown in Table 2. The effect sizes of each treatment were calculated when possible. See Table 4 for effect size values. Base on these groupings, the review proceeds by discussing the results and importance of each treatment. The paper also looks into the sensitivity of some studies, for example culturally sensitive studies and studies that included demographic characteristics such as gender.

Cognitive Behavioural Therapies (CBT)

In Table 2, it shows that CBT is the frequent used therapy in treatment of stress related disorders among refugees. This has been done either through Standard CBT, culturally adapted CBT or in combination with other therapeutic approaches. Standard exposure therapy was tested against CBT and it appears there were no significant differences between the two. That is, both effectively reduce PTSD symptoms, depression and anxiety nearly at the same rate (Paunovic & Öst, 2001). As language barrier has always been a problem among the refugees population given their divers ethnic backgrounds, two of the studies in this review tested if CBT provided by interpreters and directly by

therapist themselves have any significant differences. It turns out the two approaches reduces PTSD, depression and anxiety at the same rate (D'Ardenne, Ruaro, Cestari, Fakhoury, & Priebe, 2007; Schulz, Resick, Huber, & Griffin, 2006). From another perspective, CBT in the form of biofeedback was tested and as one may have expected, this approach reduces pain but show no effect on PTSD, anxiety and depression symptoms. From all indications, it shows that CBT has been effective in all studies included in the review. See Table 2 for details. Considering the durability of CBT, the range was from 6 months (Paunovic & Öst, 2001) to 1 year (Hinton, Hofmann, Pollack, & Otto, 2009). Pre-test was always carried out at the beginning of each treatment followed by a post-test at the end of the treatment. Some studies carried out their post-tests immediately after the treatment (Hinton et al., 2004) and others 1 to 6 years after the treatment (Muller et al., 2009). Although there was no time effect reported in post-test, one may think that the significant level between post test immediately after treatment may not be the same with longer time after treatment. But the direction of this effect remains unknown as none has been reported yet. Equally, some treatment sessions were short as 9 hours per week (d'Ardenne, 2009) despite recommendations for longer therapeutic sessions among refugees and asylum seekers (Slobodin & de Jong, 2014). Although most of the studies offered 20 to 40 hours per week, there are no practical studies that claim the effect of the length of session on treatments, most claims are theoretically founded. Socio-demographic characteristics such as gender, marital status, length of stay in the host country have been documented as some of the treatment determinant variables, none of CBT did provide information if refugees responded at the same level of treatment despite their variability of socio-demographic variables. In an unpublished study, Ndzebir, Lemétayer, and Schiltz, (2014c) shows that gender and marital status maybe influencing the way refugees and asylum seekers are coping with stress especially at the multivariate level. From another perspective, women were found to response well more than men with psychotic drugs (Stenmark, Catani, Neuner, Elbert, & Holen, 2014). This may also turn out to be the case with CBT.

Looking at Narrative Exposure Therapy (NET) as a form of CBT, it was used many times in treating refugees. In many cases, it was compared with other treatment methods and its effects were significant in PTSD symptoms reduction and not in anxiety and depression

reduction. For example in a 6-months follow up treatment, NET was found to reduced PTSD symptoms but anxiety and depression symptoms were maintain (Neuner Schauer, Klaschik, Karunakara, & Elbert, 2004; Neuner et al., 2008, 2010). Moderately contradicting the findings, Halvorsen and Stenmark (2010) indicated a small reduction of PTSD and depression symptoms in purely tortured refugees sample with NET as a treatment method. It should be recall that in NET approach, individuals gives a recount of their traumatic events until these events are no longer inducing stress. Interesting are culturally orientated CBT that were carried out among south-Asian refugees sample (Hinton et al., 2004, 2005; Hinton, Hofmann, Pollack, & Otto, 2009). As the culture in south Asian has been greatly influence by Buddhism, this approach make used of Buddhist metaphors. This approach has greatly reduced PTSD, depression and anxiety symptoms in all studies making it a better therapeutic technique suitable for South-Asian refugees. Group CBT was also evaluated (Otto et al., 2003; Cavic & Pejovic, 2005), although there were some changes in symptoms, no evidence has been found on the effect size of these changes, hence no conclusive statement about this approach.

Psychiatric treatment (purely psycho-active medications)

Only two studies did investigate refugee's patients that were treated exclusively with psychotic medications (Stenmark, Catani, Neuner, Elbert, & Holen, 2014; Jamil & Ventimiglia, 2010). In one of the studies, gender was taken into consideration as one of the determinant of treatment outcome, the findings shows that PTSD symptoms were greatly reduced in females than in men (Stenmark, Catani, Neuner, Elbert, & Holen, 2014). In the second study, there were no effects in PTSD and depression symptoms after treatment. Although it is difficult to conclude the role of exclusive psychiatric treatment in refugees maybe less beneficial. At the same time, it is widely recommended to simultaneously carry out psychological treatment with psychiatric treatment at the same time among refugees population (MarcDuff, Grodin, & Gardiner, 2011).

Multidisciplinary treatment

A group of 6 studies were found to apply multiple approaches of treatment of stress related disorders. Their treatments were psychological consisting of CBT, NET,

counseling and psychiatric consisting of purely psychotic medications. In one study, NET greatly reduces PTSD symptoms as compared to psychiatric treatment (Neuner et al., 2009). In another study, CBT was combined with psychotic medications and both simultaneously reduce PTSD and depression symptoms (Otto et al., 2003). Elsewhere in this review, when psychological treatment in form of counseling and education was simultaneously combine with psychotic medications (Carlsson, Mortensen, & Kastrup, 2003), anxiety, PTSD and depression symptoms were not affected by this approach of treatment, and hence it was not beneficial to refugees and asylum seekers. In a similar approached, a combination of psychological and psychotic medications did greatly reduces PTSD and depression symptoms among refugees (Arcel et al., 2003). Depression symptoms were equally reduced among refugees and asylum seekers with the combination of psychological (counseling, education etc) and psychotic medications (Brune et al., 2002). In more recent studies, NET was combined with psychotic medication, the treatment outcome was positive given that the PTSD and depression symptoms were greatly reduced (Stenmark, Catani, Neuner, Elbert, & Holen, 2013).

Other forms of treatments

Recently, one study demonstrated the beneficial effect of trauma focus combine with multimodal and group therapy (Drozdek, Kamperman, Tol, Knipscheer, & Kleber, 2014). This approach did relief refugees and asylum seekers from their PTSD, depression and anxiety symptoms. When social support was used as the only therapeutic approach, acculturation stress, anxiety and depression symptoms were greatly reduced with females benefiting more than men (Renner, Laireiter, & Maier, 2012). Psychodynamic as treatment approached indicated some beneficial effects by reducing PTSD and depression symptoms among refugees (Holmquist, Andersen, Anjum, & Alinder, 2006). Field therapy (acupunture, psychotherapy) was also used and appear to benefit refugees by moderately relieving their PTSD symptoms (Folks, 2002). Imagery rescripting (ImRs) have also been proven to be beneficial in the refugee's population by reducing PTSD and depression symptoms (Arntz, Sofi, & Van Breukelen, 2013). It should be noted that Imagery rescripting techniques consist of addressing certain past memories that are link with present difficulties (Arntz, 2012). Refugees and asylum seekers have also benefited

from music therapy through reduction of anxiety and depression symptoms (Akhtar, 1994).

The effect sizes of various treatments

The effect sizes were calculated for each group of symptoms and each group of treatment each time the required data was available. Also, calculations were done for after treatment and follow up period. The effect sizes *d* ranges from negative to positive .That is, CBT was able to reduce anxiety symptoms at -.15, PTSD symptoms at -.13 then at the same time reduces depression at .26 (Muller et al., 2009). The highest effect size was obtained when trauma focus, multimodal and group therapy was used. Among the stress related symptoms tested, PTSD was reduced at d = 3.94 (Drozdek, Kamperman, Tol, Knipscheer, & Kleber, 2014). When treatment approaches were compared, the highest *d* was obtained between NET and TAU in the reduction of PTSD symptoms, that is d = 1.05 (Neuner et al., 2004). When Imagery Rescripting as a treatment approach was used in refugees sample, it reduces PTSD and depression symptoms at d = 2.87 and 1.68 respectively. Detail results of these effect sizes are reported in Table 5.

Table 5

Effect sizes for dependant groups, independent groups, and comparison treatments, at ended treatment, and at follow-up

Study	Comparison of groups and symptoms	*d* at the end of treatment	*d* at follow up
Stenmark et al., (2014) Psychotic drugs	PTSD Females Vs males	 .21	
Drozdek et al., (2014) Multimodal, trauma & group therapy	PTSD Anxiety Depression	3.94 .32 .20	
d'Ardenne (2007) Standard CBT	Depression PTSD Quality of life	.61 .47 .42	
Schulz et al., (2006)	PTSD	3.38	
Hinton et al., (2004) Culturaly sensitive CBT	Depression Anxiety PTSD	2.00 2.23 2.41	
Hinton et al., (2005) Culturaly sensitive CBT	Anxiety and depression PTSD	2.81 2.19	1.10 2.11
Hinton et al., (2009) Culturaly sensitive CBT	PTSD	2.00	2.12
Halvosen & Stenmark (2010) NET	Depression PTSD	.50 .75	.89 1.18
Muller et al., (2009) CBT	Depression PTSD Anxiety	.28 -.13 -.16	.13 .88 .13
Akhtar (1994) Music therapy	Depression Anxiety	.11 1.05	
Holmquist et al., (2006)	PTSD Symptoms of distress		1.62 1.13
Neuner et al., (2004)	Depression NET vs TAU PTSD NET vs TAU	 .56 1.05	
Palic & Elklit, (2010) Multidiciplinary treatment	Anxiety and depression PTSD Global functioning	.81 .84 1.24	.53 1.05 1.44
Folkes (2002) Multiple treatment	PTSD	1.46	
Ventimiglia & Jamil (2010)	PTSD Depression	-.45 -.10	
Kruse et al., (2009) Treatment as usual	PTSD Distress symptoms	2.58 1.43	
Arntz et al., (2013) Imagery Rescripting	PTSD Depression	2.87 1.68	

Discussion

Through out this review, the main questions to be answered include: Which treatment approach is frequently used among refugees and asylum seekers in relieving their stress related disorders symptoms 2) which one is effective in treating stress related disorders 3) which one is socio-demographically oriented and finally which one has turn towards quality of life, coping and other potential indicator of treatment outcome. In this study, it shows that treatment with CBT either in standard form, in component, culturally oriented or simply in combination with other treatment methods have been well documented. The more striking issue consist of the fact that, the culturally oriented CBT have been used only in South Asian population despite the ongoing calls for a culturally oriented treatment among refugees and asylum seekers. In most cases, CBT was effective in reducing PTSD, anxiety and depression symptoms especially when it was culturally oriented and in combination with other treatment methods. NET also emerges as the frequently used treatment approach especially in combination with other treatment methods. It effectiveness in reducing stress related disorder (especially PTSD) were moderate. Another form of treatment that was well documented consists of multidisciplinary approaches. Here, treatments ranging from psychological approaches to psychoactive medications were used. Base on report and effect sizes calculations, it appears that when treatment took psychological approach, it was more effective in relieving PTSD symptoms while depression was well dealt with by application of psychoactive medications. Some 2 treatments were purely psychiatric in nature with the exclusive used of psychotic drugs. Although it is difficult to make conclusions, only one of these treatments did benefit female's refugees. One treatment was social support in nature which appears to have benefited refugees in reducing their acculturation stress and anxiety. When music therapy was used in one of the early study, there were some benefits in combating PTSD symptoms.

Setbacks and innovative propositions

While 4 studies (Hinton et al., 2004, 2005; Hinton et al., 2009; Otto et al., 2003) did adapt their treatment approaches to suite the cultural backgrounds of refugees, only one study (Stenmark et al., 2014) have documented gender effect on PTSD outcome. Nearly all studies have either used PTSD alone or in combination with anxiety and depression instrument as an indicator of treatment outcome. While none of the studies did used coping as an indicator, one study (d'Ardenne et al., 2007) did make used of quality of life as one of the treatment outcome indicator. Findings from this review suggest that a lot is still needed to be done if we want to go beyond treatment of PTSD and related symptoms. For instance, somatoform related disorders and pain have been successfully used as indicator alongside PTSD among refugees (Muller et al., 2009; Otto et al., 2003). Post-migration stressors are high among refugees and asylum seekers (Ndzebir et al., 2013; Sulaiman-Hill & Thompson, 2012a, 2012b). They is evidence that, the continues maintenance and relapse of PTSD and related disorders such as anxiety and depression are triggered by post-migration stress (Jacob et al., 2012). In light of this, there maybe a need to involve post-migration stress indicators during treatment of refuges. Although Post-traumatic Embitterment Disorders (PTED) were not included in the Diagnostic and Statistical Manual of Mental Disorder (5^{th} ed., *DSM-5;* American Psychiatric Association, 2013), its existence is being continuously documented. Firstly, it has been clinically differentiated from other stress related disorders such as PTSD (Linden, Bauman, Rotter, & Schipppan, 2008). Secondly, refugees form one of the vulnerable grouped to PTED given their resettlement difficulties, discrimination and injustice in their host countries. Thirdly, asylum seekers obtained some significant scores on PTED scale thus indicating its presence (Ndzebir et al., 2013). In relation with this, it maybe necessary to include PTED as an indicator in the treatment of stress related disorders among refugees and asylum seekers. This will not only help in relieving PTED symptoms, it will go a long way in responding to the questions of "Which therapy is best needed for the treatment of PTED" (Linden, Bauman, Rotter, Lorenz, & Lieberei, 2011). As research on stress among refugees is gaining grounds, one may ask obvious questions: how does each treatment method empower refugees so much so that their stress related

disorders symptoms are reduced? While it maybe clear that psychoactive drugs act directly on the biological system in stabilizing mood, it is certain that psychological treatment empowers individuals in multiples ways. Is coping not one of these empowerment? Certainly yes, because adaptive coping have been link to proper management of stress (Zautra, Hall, & Murray, 2010). Although some researchers argued that emotional focus coping is also beneficial depending on individual's source of stress (Juth, Dickerson, Zoccola, & lam, 2014). However we believe that in refugees population, problem focus coping should be the best in helping them manage stress. In association with this, the involvement of adaptive coping (problem focus) measures as indicator of stress related disorder treatment maybe an urgent matter. Firstly it has been shown that provision of some psychological support maybe acting directly in building up problem focus coping strategies, for example social support (Ndzebir, Lemétayer, & Schiltz, 2014a). Equally, only one study did use quality of life as an indicator of treatment outcome. It is strongly suggested that quality of life should get its grounds in the treatment of refugees. This will not only assist us in establishing the level of quality of life after treatment, but will also give us the opportunity to seek additional psychological intervention after treatment if need arises. There is evidence that social support predict quality of life among refugees (Ndzebir et al., 2014c). Therefore social support maybe employed during the treatment phase with quality of life as indicator or after the treatment has ended and there is still a need to raise up the level of quality of life. From another perspective, treatment of stress among refugees should clearly report the magnitude of the treatment effect. One good way of doing so is by calculating the effect sizes of each treatment outcome. For instance, many studies did unclear conclusions or conclusions base on casual evaluation. One such study reaches a satisfaction results by stating that some refugees were fully free of PTSD (Akinsulure-Smith, 2010).

Although the issue of multicultural attitude is gaining ground in refugee research, little is still done to determine its role in stress treatment among refugees and asylum seekers. It is clear that psychological precondition associated with multicultural attitude may bring in a lot of hassle among individuals (Berry & Kalin, 1995). In light of this, refugees and asylum seekers form a suitable population for which multicultural attitude should be

greatly considered. Indeed, a good and positive level of multicultural attitude maybe an important step in combating post migration stress. One way of building up a good multicultural attitude is through social support (Ndzebir, Lemétayer, & Schiltz, 2014b). This is so because social support acts directly on multicultural attitude or indirectly through self-efficacy. It may therefore be wise to introduced multicultural attitude as one of the indicator in the treatment of stress.

In summary, it has been demonstrated that PTED, Adaptive coping, Quality of life, and multicultural attitude are important ingredients to be considered for the treatment of stress related disorder among refugees and asylum seekers with social support as their main treatment technique (Ndzebir et al., 2013, 2014a, 2014b, and 2014c).

Study limitations

Although there was extensive search in the data base to locate the relevant studies to be included in the analysis, the study fail to do manual library research. In accordance with this set back, it may appear that some data have been lost. For example unpublished thesis, books and book chapters may contain studies dealing with treatment of stress related disorders among refugees and asylum seekers. Equally, since only studies published in French and English were considered, we may have lost some important articles. For instance there was one study that fitted the inclusion criteria in almost all conditions but was eliminated because the work was written in German. The effect sizes were calculated with data from heterogeneous group, an aspect usually regarded to be problematic. In future, there should be extensive search of literature beyond online data base. Equally, the inclusion criteria maybe broaden such as to allow for the inclusion of more relevant studies.

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Chapter 9

Synthesis and Practice

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Synthesis

This dissertation consists of the following objectives: (1) to systematically sort out the existing studies on stress, coping and quality of life among refugees and asylum seekers: (2) to assessed the severity of Post-Traumatic Embitterment Disorders (PTED) and various post-migration stressors in refugee and asylum seekers sample: (3) to determine the effect of social support, self-efficacy and multicultural attitude on coping with stress: (4) to assessed the predicting power of social support and self-efficacy on multicultural attitude: (5) to evaluate the social support, coping and quality of life model: (6) to critically review various treatment approaches dedicated to stress related disorders. Equally, the dissertation was divided into three different parts: (part 1) consist of general introduction and problematic of the study (Chapter 2), chapter 3 and 4 are dedicated to objective 1 and 2: (part 2) made up of chapter 5, 6 and 7 is dedicated to objective 3, 4 and 5: (Part 3) composed of chapter 8 and 9, with chapter 8 devoted to objective 6. Chapter 9 of this work consists of synthesis and practices. The synthesis proceeds by describing the study design and sample. The findings from parts 1 are highlighted by addressing the achievements made from objective 1 and 2. This is followed by describing the findings from part 2 with realization details of objective 3, 4 and 5. Results from Part 3 with lessons learned from objective 6 are narrated. Limitation of study ranging from context to methodological are stated down followed by a detail description of study implication in the clinical setting. Ending the synthesis, the study concludes by making propositions for future research in refugee and asylum seekers population.

Study design and sample

The main organizations that are concern with refugees in Luxembourg include Caritas and the Red Cross. These two institutions were contacted in 2011 and the right to get in touch with asylum seekers and refugees was granted. Data collection took place between 2011 and 2013 at various centers. These two infrastructures made it possible to get in touch with a good number of refugees and asylum seekers hence the sample was made up of a diverse cultural background. The questionnaires were filled in by the asylum seekers themselves with help from us in times of difficulties. In part 1 of this dissertation, 33

asylum seekers participated in post-migration stress interviews while 102 completed the Post-traumatic Embitterment Disorders (PTED) questionnaire. At the same time, 221 asylum seekers participated in the second part of the project. The minimum length of stay of participants in Luxembourg was 6 months followed by a maximum of 10 years. The males outweighed the females participant at a ratio of 64% : 36%. The average age was 37 years. Montenegro, Bosnia, Albania, Algeria, Afghanistan and Syria were the most represented countries of origin in the sample. There were no major distresses during the data collection period from the parts of participants. Arising difficulties and doubts were immediately handled.

Part 1: Assessment of Post-Migration Stress, Post-Traumatic Embitterment Disorder, Coping and Quality of Life among the Refugee Population (Chapter 2 to 4)

Review of Studies on Stress, Coping and Quality of Life (chapter 3)

The objectives of the study presented in chapter 3 were to identify the types of stress that are being research on in the refugee sample, coping moderators and quality of life. Approximately more than 186 000 studies are dedicated to stress while 36 000 focuses to coping only (Aldwin, 2007). We were therefore surprised by the limited number of studies that were dedicated to the refugees and asylum seekers population at the time (September-December 2012) of data base searched. Given the mental vulnerability of refugees and asylum seekers, there have been repeated calls to intensify stress related research among them (Jonhson & Thompson, 2008; Steel, Silove, Bird, Mcgorry, & Mohan, 1999; Rew, Clarke, Gossa, & Savin, 2014). Studies on quality of life among refugees were also rare at the time of literature searched. A good number of studies included in our systematic review focuses on PTSD while coping resources were social support in nature. Considering that post-migration stressors are considered to be high among refugees and asylum seekers (Sulaiman-Hill & Thompson, 2012), we expected a good number of studies to be dedicated to this course. This was not the case as stress was

mostly PTSD in nature. Only one study has considered Post-Traumatic Embitterment Disorders (PTED). However, acculturation stress was documented but limited. Although coping facilitators were social support in nature, we expected a good number of studies to include coping resources far beyond social support. For example self-efficacy and multicultural attitude have been cited as credible facilitators of coping with stress (Pahud, Kirk, Gage, & Hornblow, 2009; P. T. Wong & J. C. Wong, 2005). Also, the fact that some studies categorically ignore coping facilitator were inconsistent with the recommendations to be considered when researching with stress and coping. Furthermore, there was a lot of heterogeneity with regard to methods and coping facilitators outcomes on various types of stress.

Conclusively, the broader range of stress among refugees and asylum seekers are poorly supported by evidence while coping resources are narrowed down. In our view, the advantages of post-migration stress are not fully exploited, which is disappointing considering its (post-migration) role in the clinical setting (Sternmark, Guzey, Elbert, & Holen, 2014; Palic & ElKlit, 2011). Base on our opinion, post-migration stress and coping facilitators are important areas of further research (consult "Implications for future research"). Base on expectations and lessons learned from this research, we strongly believed that studies on stress and coping among refugees and asylum seekers should strictly follow recommendations (Box 2, Chapter 2). Furthermore, in accordance with recent literature (Matanov et al., 2012) quality of life should also be at the forefront of coping research among refugees. Indeed there was evidence of the predicting effect of coping on quality of life (chapter 6).

Post-Migration Stress and Post-Traumatic Embitterment Disorders (Chapter 4)

The study carried out in chapter 4 assesses the various sources of stressors in asylum seekers sample as there are encountered with various resettlement hassles in their host countries. A sample of asylum seekers was also screen for the presence of Post-Traumatic Embitterment Disorders (PTED).

Since there is continues evidence that Post-migrations stressors helps in maintaining and relapsing PTSD with related disorders such as depression and anxiety, its role in the treatment of stress related disorders is acknowledged (Nickerson, Bryant, steel, & Silove,

2011; Palic & ElKlit, 2011). As refugees and asylum seekers arrived in their host country, they are victims of resettlement stress ranging from financials, unemployment, administrative and acculturation (Silove, Steel, Bauman, Chey, & McFarlane, 2007). Furthermore, PTED may also set in. This is so because PTED comes in when individuals are face with unjust live events such as unemployment (Linden, Baumann, Lieberei, & Rotter, 2009). In this study, there was good evidence of stressors arising from difficulties face in the host country. There were proofs of social isolation especially among female asylum seekers. This was directly link to social hassles originating from the host country. Social isolation has been link to suicidal thoughts among refugees (Ferrada-Noli, Asberg, Ormstad, Lundin, & Sundbom, 1998). Lack of finances did categorically cut off communication between asylum seekers and their family members. This poor network put social support from family members in jeopardy. This poor communication may degenerate to acculturation stress (Nwadiora & McAdoo, 1996) which indeed has been evident in the study. Participants did see themselves as partially integrated in the host country society, but were face with difficulties related to cultural differences. These cultural hassles have been reported elsewhere (Henry, 2012). These difficulties range from inability to speak the native language to behavioral pattern in their host country. Administrative disappointments such as long period of waiting for the asylum outcome did restored fear of repatriation among asylum seekers. These results are consistence with other findings from other post-migration stress related studies among refugees and asylum seekers (Betancourt et al., 2014; Sulaiman-Hill & Thompson, 2012). We strongly believed that constant social culturally oriented support can go a long way in helping refugees and asylum seekers overcome these stressors. This will restored in them a sense of hope once they are constantly cut off from reality. Re-establishing a good communication network among them and the community is essential for their well being (Betancourt et al., 2014).

Furthermore, Post-Traumatic Embitterment Disorder (PTED) was evident in the asylum seeker's sample. More than 80% of participants scored above the cut off point on the PTED scale. This maybe link to financial difficulties and unemployment. These difficulties are regarded as a form of injustice by asylum seekers. With the presence of PTED among refugees, there maybe a need for constant screening. In light of this,

treatment approaches needs to take in consideration the existence of PTED among refugees and asylum seekers (see chapter 7 for treatment recommendations). The study created a theoretical model that established the link between stressors, PTSD and PTED (Figure 1, chapter 3). This model, once verify can go a long way in shaping the way we carry out treatment of stress related disorders among refugees and asylum seekers. In light of this, further research is needed to verify and validate the model.

Part 2: Assessing the effect of Social Support, Self-efficacy, Multicultural Attitude, Quality of Life and Coping with Psychological Stress (Chapter 5-7)

Social Support, Self-efficacy and Multicultural Attitude on Coping with Stress among Refugees and Asylum Seekers: A Structural Equation Modeling Approach (Chapter 5)

The study described in chapter 5 assesses the predicting effect of social support, multicultural attitude and self-efficacy on coping with stress among refugees and asylum seekers. Preliminary, the effect of all the predicting variables were positive and significant. As hypothesized, social support, self-efficacy and multicultural attitude were significantly predicting coping with stress. In a more univariate studies, social support was found to be a protecting factor of self-efficacy in a refugee sample (Ferren, 1999). Self-efficacy is link to effective ways of coping (Salanova, Garu, & Martinez, 2006). Similarly, there is good evidence about the role of social support in enhancing coping with stress among refugees (Plante, Simicic, Anderson, & Manuel, 2002; Gerritsen et al., 2006). We predicted that multicultural attitude will simultaneously act with social support in predicting coping (P. T. Wong & J.C. Wong, 2005). However the predicting power of multicultural attitude was small as compared to that of social support and self-efficacy. This is understandable as the correlation between multicultural attitude and coping was also low. One possible explanation maybe that, the psychological preconditions associated with multicultural attitude maybe limited. There maybe a need to further research on psychological characteristics that constitute multicultural attitude. Notwithstanding, the three variables played an important role in the model given the good causal relationship despite the presence of some bad fit indices. As adaptive coping helps

refugees and asylum seekers in managing stress, there is therefore an indirect positive effect on depression and general anxiety. The model though still in its early stage of research proved to be useful in setting up treatment approaches that are aimed at relieving refugees and asylum seekers of their stress related disorders. We therefore feel that the tested model have therapeutic potential in offering health practitioners that are concerned with the psychological wellbeing of this vulnerable population. In light of this, constantly providing culturally oriented social support to refugees remains an in important step in combating stress related disorders. Multicultural attitude training can be beneficial in managing post-migration stressors and breaking the cultural difficulties encountered in the host country.

Self-Efficacy and Social Support as Predictors of Multicultural Attitude among Refugees and Asylum Seekers (Chapter 6)

In chapter 6 we described a quantitative study in which questionnaires were used to determine the predicting effect of self-efficacy and social support on multicultural attitude. This was done through structural equation modeling. Furthermore, through multiple linear regressions, the predicting power of gender and length of stay in the host country on multicultural attitude was also determined. At a first glance, the relationship that exist between social support, self-efficacy and multicultural attitude was positive, good and significant at $p < .001$. The lowest r value of .16 was produced between multicultural attitude and self-efficacy. This was much lower from what we have expected. For instance there have been strong suggestions about the relationship that exist between the self-efficacy and multicultural attitude (Pahud, Kirk, Gage, & Hornblow, 2009). Equally, the predicting effects of social support and self-efficacy on multicultural attitude were evident in this study. As expected, all paths loaded positively and significantly at $p < .001$ and .01. Elsewhere, there have been repeated calls for multicultural attitude competence training. That is, changing the individual perception of knowing, caring and acting in the society (Freddy & Ann-Marie, 2013). With this model, we have shown that one way of doing so is by providing social support. Here social support will indeed burst the self esteem level of refugees and asylum seekers and their multicultural attitude psychological preconditions will be positively activated. The model

where gender and length of stay in the host country were thought to be predicting multicultural attitude was not significant. This is contrary to suggestion from some studies (Lam & Sue, 2001). However gender did emerge as the sole predictor of multicultural attitude among refugees and asylum seekers. One explanation maybe that, as refugees tend to spend more time in the host country, they are overwhelmed with stressors so much such that the length of stay became insignificant to determine multicultural attitude. It may also be that the multicultural attitude is more of a psychological entity that may responds well to formal help rather than an informal one. Nevertheless, gender and length of stay in the host country remain important in multicultural attitude research. In further study, there maybe a need to redefine the variables in this model.

Social Support and Coping as Predictors of Quality of life (Chapter 7)

The study presented in chapter 7 assesses a psycho-social model with social support and coping as predictors of quality of life among refugees and asylum seekers. From another perspective, we assess the impact of marital status and gender on quality of life. Equally, with multivariate approach the effect of gender and marital status were computed against all the sub-scales of ways of coping and quality of life. There exist a good number of evidence suggesting the beneficial role of social support and adapting coping on the quality of life among refugees and asylum seekers. Firstly, social support has been shown to be a good promoter of quality of life in a refugee sample (Matanov et al., 2013). Secondly, refugees with adaptive coping strategies were reported to be living a good quality of life (Ghazinour, Richter, & Eisemann, 2004). In this study, there were evidence of the relationship that exists between social support, coping and quality of life. All designated paths correlated with each other at $p < .001$. Nevertheless, the confirmatory factor model resulted in a bad fit to the data. When the latent regression model was tested, the presumed paths loaded positively and significantly at $p < .001$ and $p < .01$ although we obtained poor fit indices that outreached the recommended values. Nevertheless, the predicting power of coping on quality of life was not high as we may have expected. One of the explanations maybe that, emotional focus coping maybe promoting quality of life as well. There has been evidence suggesting the positive role of

emotional focus coping in stress reduction and good quality of life (Juth, Dickerson, Zoccola, & lam, 2014). In light of this, future study may exploit the scenario where emotionally focus coping maybe promoting a good quality of life. Another possible explanation maybe that our four sub-scales considered for the study may have been limited. Therefore there is a need for a study that will extend the number of sub-scales of the adaptive ways of coping in other to determine their predicting effect on quality of life. Notwithstanding, the model as a whole offers a good step in setting up therapeutic approaches that will enhance the quality of life among refugees and asylum seekers. The model demonstrates the need of proper social support in asylum seekers centers. This can be through creating good communication networks, community engagement and outdoor social activities. Furthermore, the model calls for the training of refugees and asylum seekers on the used of proper coping strategies such as to improved their quality of life. Elsewhere in the study, marital status produces significant results only with the psychological sub-scale of the quality of life. Similar findings have been reported in other study with refugee sample (Eriksoon-Sjöö, Cederberg, Östman, & Ekblad, 2012). The remaining three sub-scales did not produced any significant results hence the findings from here contradicted our expectations. Equally, there was no gender effect with any of the four sub-scales of quality of life. Even though there were some mean differences, none were significant. This is in contrast with other studies. For instance, females refugees were found to be significantly living a poor quality of life (Von–Beutel, Decker, & Brähler, 2007). In other findings, female refugees were shown to be living a poor quality of psychological health (Sundquist, Behmen-Vincevic, & Johnson, 1998). We were expecting to replicate these findings. An explanation for the insufficient replication of findings maybe directly linked to methodological differences. In studies where gender was reported to be having a significant effect on quality of life, one way ANOVA was used in determining this differences. When females were found to be living a poor quality of psychological life, one way ANOVA was used. In our study, we make use of two tail *t* testing. As an attempt to gain some methodological advantages, we did perform MANOVA on all sub-scales of ways of coping and quality of life. Marital status and gender were computed against all these sub-scales. As it turns out, there were significant results only at the multivariate level. Follow up ANOVA was only significant with social

relations sub-scale of the quality of life with females scoring higher than males. For the ways of coping, follow up ANOVA was significant only with seeking social support with females scoring higher than males. The findings from this study contradict results from other studies. For example it has been reported that women have the tendency of using emotional coping strategies (Matud, 2004). Despite this contradictions, our results share some partial similarities with other findings from ells where. For instance, it has been shown that women refugees turns towards family support as a way of coping with stress (Renner & Salem, 2009). Nevertheless, gender and marital status needs to be considered when setting up intervention approaches that will enable refugees and asylum seekers to cope well with stress and live a good quality of life.

Part 3: General Discussion

Review on the Treatment of Stress Related Disorders among Refugees and Asylum Seekers (Chapter 8)

The systematic review of literature presented in chapter 8 seeks to indentify various stress related disorders treatment approaches that are apply in refugees and asylum seekers population. Taking into consideration the limitations of these treatment approaches, innovative proposition are made. The review of literature revealed several advantages as well as disadvantages on the use of various stress related disorders treatment approaches among refugees. Some of these disadvantages have been reported in chapter 3, 4, 5 and 6 of this present work. For example, through out the review we found no study that took into consideration Post-Traumatic Embitterment Disorders (PTED) as one of the treatment indicator. Meanwhile, PTED have been found to be present in asylum seekers sample at the rate of 80% (Chapter 3). Equally, post-migration stressors were ignored by studies that attempted treatment of stress related disorders among refugees and asylum seekers. There was evidence of post-migrations stressors stemming from acculturation, financial, social and administrative difficulties in the host country (Chapter 3). Furthermore, as treatment of these stress related disorders may entails finding proper ways of coping with them, non of the treatments did make use of coping as an indicator .

Mean while research suggest that coping itself forms an integral part of stress (Lazarus & Folkman, 1986; Folkman & Moskowitz, 2004). In connection with this, there was evidence of coping promoting quality of life among asylum seekers (Chapter 6). Since treatment of stress related disorders have an implicit objective of raising the quality of life (Palic & Elklit, 2011), adding quality of life as one of the indicator during treatment is of an added advantage. In this review, a majority of treatments took Cognitive Behavioral Therapy Approaches (CBT). Although most of them were successful, this success was greater for Post-Traumatic Stress Disorders as compared to depression and anxiety. One possible explanation maybe that depression and anxiety are more mood oriented disorders that act more on biological systems. This maybe true as Multiple Treatment approaches (Psychotherapy and Psychopharmacology) did show some superiority in the reduction of anxiety and depression symptoms (Brune et al., 2002; Neuner et al., 2008; Stenmark, Catani, Neuner, Elbert, & Holen, 2013). To our greatest surprised, only a few studies did make used of culturally adapted CBT (Hinton, 2004, 2005). Referring to other treatment sensitivities such as gender and marital status, only one study did carry out gender orientated treatment of PTSD and depression (Stenmark, Guzey, Elbert, & Holen, 2014). The scarcity of gender oriented treatment is in contrast with the calls from our findings. There was evidence of gender effect in coping and quality of life in some parts (Chapter 6). Still in chapter 6, marital status did have a partial role to play in coping and quality of life. In light of this, we strongly recommend the involvement of these demographic characteristics in the treatment of stress related disorders among refugees and asylum seekers. Their consideration in the treatment process will be of an added advantage (Giacco, Matanov, & Priebe, 2013; Vaage et al., 2010). Moreover, psychological pre-conditions associated with multicultural attitude may also yield fruits if considered in the treatment of stress related disorders. Here, detecting the level of this attitude among refugees and asylum seekers remain an important step in combating their stress related disorders. In this study, we show that social support and self-efficacy maybe predicting multicultural attitude positively (Chapter 5). In light of this, it is highly recommended to contextualized stress related treatment among refugees and asylum seekers since their cultural background is always diverse. Drawing from the

reviewed literature, we strongly recommend the calculation of effect size values before drawing conclusions of any treatment outcome.

Limitations

Context

One of the limitation of this research project maybe the setting on which the study was conducted. For example, the refugee and asylum scenario is different from one country to another. Secondly the Luxembourg society may affect the refugees and asylum seekers differently as compared to other societies. In support of this point, we came across situation where assistance is provided to asylum seekers by either social workers or educators. In most cases, only administrative assistance is available as the number of psychologist are limited. In light of this, one may not expect to have the same results in setting where all social assistance facilities are already available. These may have affected the generalization of our findings. However, we strongly believed in the transferability of the findings in other setting base on our sample diversity.

Methodology

Like other research project, we are equally face with some methodological limitations. The first and foremost came from the sample size used in this project. We were face with the problem of sample size limitation, in light of this, some sub-scale were eliminated especially during the execution of structural equation modeling. This was done to respect the principles of parameter to sample ratio. With this approach, there is no doubt that a lot of information has been lost. For instance, with a sound sample size, we could have included all the sub-scales of the ways of coping questionnaire in the structural equation modeling. Furthermore, our approach of investigating post-migration stressors with semi-structured interviews may not have been the best. This is because important information may have been lost. In light of this, one may have think of open interview in combination with some standardized instrument for the collection of data on post-migration stressors. Language barrier was also a problem in this present work. Since only English and French speaking asylum seekers could participate in the study, we lost a good number of participants especially from war intensive countries like Libya, Syria, Iraq and

Afghanistan. Although, asylum seekers are already refugees in psychological terms, we collected data purely from asylum seekers. It may have been interesting to have data from sample that their refugee status has already been recognized. However more concern is focus to asylum seekers as they maybe living a more difficult life as compared to their counterparts. Moreover, it maybe difficult to substantiate the degree of fairness at which the participants have responded to the questionnaires. Lack of an approach to corroborate their responses with their experience may have hampered the reliability of our instruments. For example there were situations where asylum seekers express fear of participation in the study. Although the assurance from our part did clear some of their doubts, one may not be certain as to what level this may have influence the trustworthiness of their responses. In overall, our models yielded a bad fit, based on important fit indices such as RMSEA values. In this situation, there is a need to carry out further literature research that will allow modifications at the specification level. Secondly, exploratory factor analyis could also be a first step to identify the problematic items. In the worst scenario, a large sample size of data may be independently collected.

Implications for Future Research

A number of interesting area for further research were identify in this projects: 1) a study that will investigate how social support, self-efficacy, and multicultural attitude affect emotional coping strategies in refugees sample, 2) study that will incorporate gender, marital status and length of stay in the host country in the social support, self-efficacy, multicultural attitude and coping model, 3) a study that will assess how emotional focus coping together with problem focus coping will moderate the quality of life among refugees and asylum seekers. Base on the first suggested study, there is evidence that emotional coping maybe playing a positive role in dealing with stress (Juth, Dickerson, Zoccola, & Lam, 2014). In light of this, it maybe interesting to investigate if there is any predicting effect of social support, self-efficacy and multicultural attitude on these coping strategies in the refugee sample. Since demographic characteristics such as gender, marital status and length of stay in the host country have been shown to be playing a role in coping and quality of life, it will be advisable to simultaneously incorporate them in the model evaluated. This could not be done in our study given the limited sample size.

Furthermore, there is a need for a study that will practically test coping, quality of life, multicultural attitude and PTED instrument as indicators for the treatment of stress related disorders. In future, there is a need to further validate the translated instrument separately from the ones in their original language. This is a crucial though expensive and time consuming step when conducting complex studies that assesses many levels of psychological and cognitive functioning. In relation to this, further study is needed to assess the robustness of the translated instruments with the backup approach. As the thesis have propose a more formal stepped care mental health model, there will be a need to do a pilot study to investigate the effectiveness of such a model before final implementation. Referring to the transferability of our findings, there maybe a need to carry out a similar study in a different country. Lastly, performing a longitudinal study that will test the stability of our findings ranging from the reliability, validity to our main results of the study is recommended.

Clinical importance

Refugees and asylum seekers in Luxembourg are in need of regular mental health care service that can be assisting them in their daily life functioning. At the same time, there is a need for the adaptation of present mental health system to suit their mental health needs. Such a system needs to adopt the practice of regular and adequate screening for various stressors and mal-adaptive adjustment behaviors. This approach can go a long way in helping refugees and asylum seekers both in Luxembourg and elsewhere to live a healthy mental life. Furthermore, there is a need for evidence base practice treatment approaches that is more effective in treating refugees and asylum seekers in Luxembourg. Recently, referring to the effectiveness of stress treatment, there has been a call to evaluate and adopt innovative treatment approaches that are directly aim at helping refugees and asylum seekers cope with their daily stress and live a good quality of life (Halvosen, Stenmark, Neuner, & Nordhal, 2014). Regrettably, many asylum seekers in Luxembourg received little or no psychological support. The few educators and social workers spend more time with them assisting in administrative work. In light of this, refugees and asylum seekers may found themselves in psychiatric centre due to lack of preliminary psycho-social support that could have help them to came to good terms with

their lost, psychological distress, traumatic stress reaction and build healthy acculturation strategies. This negative psychological reaction comes with negative impacts given that, individuals who experience traumatic life event and have not gone through adequate help such as to deal with it are victims of some psychological difficulties. Some of these difficulties include guilt, feeling of helplessness, hopelessness, shame and social isolation (Perry, 2006). The acculturation stress is further aggravated by the long waiting times for asylum outcomes. This installs a dilemma of when they will ever be considered residents of their host countries. In previous studies, depressive symptoms have been link to host country acceptation uncertainty (Phinney, Locher, & Murphy, 1990). Mental health professional needs to work in collaboration with country authorities such as to minimize the risk of acculturation stress and other resettlement hassles. Through this collaboration, mental health professional will be able to raise awareness of the psychological dangers associated with long waiting periods of asylum outcomes. Given that pedagogical and administrative help may not be enough to restores proper psychological functioning in refugees and asylum seekers, there is a need for a stepped care model. A stepped care model is a model of healthcare delivery with two basic characteristics "*Firstly, the suggested treatment within the stepped care model should be the least restrictive of those available, and at the same time can provide significant health improvements. Secondly, the model itself is self-correcting which means it is liable to adaptation base on the context*" (Bower & Gilbody, 2005, p. 11)

Through out this project, we have emphasis on the approaches that will alleviate stress, provide good coping strategies and good quality of life among refugees and asylum seekers. We have demonstrated how this can be achieved by relying on various psycho-social resources such as social support, self-efficacy and multicultural attitude. These recommendation approaches are summarized in the state of the art flow diagram below. In this model, the type and intensity of need correspond to the level of psychological distress and the needs of refugees and asylum seekers.

Figure 1. The state of the art model aim at protecting and promoting a good mental health and quality of life among refugees and asylum seekers.

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Summary

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Chapter 1

We discussed the literature with regard to the mental health status of refugees and asylum seekers. Also, the mental health system and needs for refugee and asylum seekers were reviewed. We looked at their various stressors with common stress related mental disorders. Furthermore, the quality of life of refugees and asylum seeker was a concern for this chapter. Lastly, various coping facilitators are narrated with the research objective and method used in achieving the objectives stated. For these past years war and conflict has increase the number of refugees and asylum seekers world wide. As of 2014, the United Nation High Commission for Refugee (UNHCR) put the number at around 51 million people. In this chapter, we have shown that refugees are not simple migrants given their precarious situation from home country through flight to the host country. While migrants prepay their journeys, travel with personal documents, travel with no traumatic experience and are highly welcome in the host country, refugees travel with traumatic experience, little or no personal documentation and are regarded as intruders in the host country. Looking at refugees situation in Luxembourg, closed to 7000 asylum application have been recoded in Luxembourg between 2009 and 2014 base on data from the ministry of external affairs. Furthermore, Luxembourg has been receiving conventional refugees, quota refugees and family reunification refugees. With the mental health system for refugees and asylum seekers given less attention, our search reveal that Red Cross and Caritas are the main players in the field of refugees and asylum issues. Post-migration stressor frequent in refugees and asylum seekers population include acculturation, grief and loss, unemployment, poverty, change of family, administrative difficulties, community integration difficulties and cultural shock. As per stress related mental disorders, depression and general anxiety, acculturation stress, Post-traumatic Stress Disorders and unexplained psychosomatic disorders were the most frequent in this vulnerable population. While review shows that refugees and asylum seekers are living a poor quality of life, we found no study on their Post-traumatic Embitterment Disorder situation despite their unjust life experiences. Equally, external coping resources were social support in nature while self-efficacy was reported to be helping in shaping coping strategies. Religion and spirituality has been reported as a way of coping with stress

among refugees and asylum seekers. While coping with stress in a multicultural context have been reported, no studies have investigated the multicultural attitude of refugees and asylum seekers. Given the review of literature, we therefore aimed at sorting out various post-migration stressors among refugees and asylum seekers in Luxembourg while assessing their post-traumatic embitterment disorders. We intend to investigate the predicting effect of social support, self-efficacy and multicultural attitude on coping with stress. Equally, we investigate the enhancing effect of social support and self-efficacy on multicultural attitude. At the same time, the effect of coping and social support on quality of life is considered. Achieving these objectives, semi-structured interviews questionnaire that assessed administrative, acculturation, social and financial stressors are being constructed. Collecting quantitative data, post-traumatic embitterment disorders, ways of coping, self-efficacy, multicultural attitude, social support and quality of life standard questionnaires are used. While content analysis is been deployed for the analysis of interviews, statistical approach mainly structural equation modeling is being used in testing and assessing various models constructed.

Chapter 2

Since the psychological conceptualization of stress in 1986 by Lazarus and Folkman, a lot of progress has been done in this domain. Thanks to this progress that mental health professionally are able to decode approaches used by individual in managing the stress itself. One of such approach is coping. “Stress in this study consists of the relationship with environment for which an individual appraises as significant for his or her wellbeing and in which the demands tax or exceed available coping resources” (Lazarus & Folkman, 1986, p.63). On the other hand, coping is handled as “the thoughts and behaviors used to manage the internal and external demands of situations that are appraised as stressful” (Folkman & Moskowitz, 2004, p.745). In light of this, there is a need for a progressive search of those variables that can help in enhancing coping with stress. Some of these variables considered for this study includes, social support, self-efficacy and multicultural attitude. Social support consisted of external resources that enhance the use of coping strategies while self-efficacy refers to individual’s thoughts on his or her abilities to manage stressful life events. Also multicultural attitude stood for

individuals ability to know, act and care about diversities in the society. Refugees and asylum seekers are among one of the vulnerable population that are constantly subjected to stressful life event. These stressful life events begin with various psychological traumas in their home countries through flight and post-migration stressors encountered in their host countries. These psychological difficulties in many cases give raise to post-traumatic stress disorders and in some case post-traumatic embitterment disorders. While refugees are considered as individuals who can not stay in their countries given the fear of persecution, war, violence, discrimination or on any reasonable grounds, the study at hand exploited how the above name resources assist them in coping with stress and quality of life. Quality of life was treated here as "individuals perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns" (WHOQOL-BREF, 1996, p.5). There is good evidence suggesting the positive role played by facilitators in coping with stress among refugees and asylum seekers. Furthermore, when these stressors are well manage, resilience is build which further eliminate various stress related disorders such as depression and anxiety thus inducing a good quality of life. Despite the extensive research on stress and coping, there are limited findings on the practical implications on the role played by various coping resources in the management and treatment of stress related disorders. Furthermore little is known about the added value of quality of life and post-traumatic embitterment disorders as indicators of the treatment of stress related disorders. Knowledge on the practical implications of various coping resources and the added values of quality of life and post-traumatic embitterment disorders as treatment indicators is needed for the proper optimization of various approaches in the treatment and management of stress related disorders.

The research questions in this dissertation were: 1) what are the trends in the research of coping with stress and quality of life among refugees and asylum seekers? Which stressors exist among refugees and asylum seekers? Are refugees victims of post-traumatic embitterment disorders? 2) How do social support, multicultural attitude and self-efficacy simultaneously influence coping with stress among refugees and asylum seekers? Is there any predicting effect of social support and self efficacy on multicultural attitude among refugees and asylum seekers? Do adaptive coping with stress and social

support predict quality of live among refugees and asylum seekers? How do the models with adaptive coping, quality of life, social support, multicultural, self-efficacy fit to the data? How do gender, marital status and length of stay in the host country relate to coping and quality of life? Base on the evaluated models, can we construct an innovative treatment approach that can be employed among refugees and asylum seekers such as to reduced their stress related disorders?

Chapter 3

In this chapter we discussed various stresses that are frequently research on among refugees and asylum seekers. At the same time, we look at various coping resources that are considered in existing studies. While commenting on the changes that have taken place with time, we looked at existing studies on the quality of life among refugees and asylum seekers. There are recommendation to simultaneously study stress and coping among refugees and asylum sample. Equally, there have been calls to go beyond post-traumatic stress disorders such as to find effective ways of treating stress related mental problems among refugees and asylum seekers. However, little is known as to how far research has responded to these calls. We systematically review existing literature to identify various coping resources, how they have been reported to be affecting stress, various types of stress and quality of life. A good number of studies did consider social support in various forms as one the coping facilitator. Surprisingly, none of the studies did include self-efficacy and multicultural attitude as coping resources. Although a majority of studies did handle coping and stress together, most were concern with post-traumatic stress disorders. Post-migration stressors were neglected. Acculturation stress did gain some attention but not as much as we have expected given the cultural hassles this vulnerable group encounter in the host country. At the same time, one study assessed the quality of life while cautioning about the existence of post-traumatic embitterment disorders and complex post-traumatic stress disorders among refugees and asylum seekers. Although most studies reported significant gain from social support as coping facilitator, a lot of these studies were descriptive in nature with little practical evidence of these gains. Few studies did identify religion as a distinctive coping facilitator. Studies appear to give a close eyes to recommendation to be considered when researching with

stress and coping among refugees and asylum seekers sample. The gain provided by each coping resources seemed to lack scientific basis. There is therefore a need for further studies to fulfill these gaps.

Chapter 4

In this chapter, we deal with post-migration stressors and Post-Traumatic Embitterment Disorders (PTED) among refugees and asylum seekers. There has been evidence of high level of post-migration stress in the refugee's sample. From another perspective, refugees and asylum seekers psychological condition makes them vulnerable to PTED. It is therefore advantageous to know how these two psychological difficulties affect refugees and asylum seekers such as to be able to optimize their mental health needs. Furthermore, any attempt to successfully treat Post-Traumatic Stress Disorder (PTSD) and related disorders such as depression and anxiety must start by eliminating post-migration hassles encountered in the host country. There will always be a relapse in must cases once the post-migration hassles are not dealt with adequately. We assessed acculturation, administrative, social and financial difficulties among asylum seekers (N = 33) in the host country. Although this area of stress is frequently neglected, we found evidence to support our expectations. Participants did express difficulties in communication due to financial and language problems. In light of this, many asylum seekers are cut off from families back in their respective countries. In this perspective, social support from family is in crisis. Although a good number of asylum seekers did show some positive behavioral pattern of acculturation, there was evidence of identity conflict in many. This install the aspect of lost and acculturation stress in the host country. Long awaiting times of asylum decisions did aggravate fears of detention and repatriation. Repatriation means they will be face with the same trauma that causes them to flee. Moreover, there was evident of social isolation especially in women. This maybe signally the initial stage of emotional disorders that are capable of conducting individuals to suicidal acts. Further more, asylum seekers (N = 102) completed the PTED questionnaires. Preliminary findings suggest that refugees and asylum seekers are victims of post-traumatic embitterment disorders. This goes in line with our expectations as this vulnerable group are victims of unjust treatment. More than 80% of participants scored above the cut off

point (≥ 2.5) of the mean total score. Equally, the level of severity per item was greatly influence by gender and marital status. This calls for concern on the role of gender and marital status on PTED in asylum seekers population. Further studies may exploit this relationship. We concluded by setting up a psycho-social model comprising of post-migration stressors, post-traumatic stress disorders and post-traumatic embitterment disorders. This model can be validated in a subsequent study.

Chapter 5

We assessed the predicting effect of social support, self-efficacy and multicultural attitude on coping with stress. At $N = 221$, asylum seekers completed the ways of coping questionnaires, multidimensional scale of perceived social support, self efficacy questionnaires and multicultural attitude questionnaires. This exercise took place mainly in various asylum and refugees centers in Luxembourg. Although the Cronbach's alpha values for some dimensions were low, good results from Confirmatory Factor Analysis (CFA) did pave the way for structural regression model analysis. The low alpha values for some sub-scales maybe directly attributed to the diverse nature of the population. This setback may occur in situation of small and non representativeness in the total sample. Nevertheless, there was evidence of relationship among all the sub-scale though not as much as we might have expected. The CFA cemented this relationship with good fit indices and better correlation values. As we hypothesized, social support significantly predict coping at $\beta = .58$ $p < .01$ and self-efficacy at $\beta = .42$ $p < .01$. At the same time, social support predicted multicultural attitude at $\beta = .31$ $p < .01$. Self-efficacy acted on coping at $\beta = .71$ $p < .01$. The lowest value ($\beta = .28$ $p < .001$) was obtained for multicultural attitude predicting coping. This maybe link to diversity problem and lack of enough or relevant psychological precondition in the multicultural attitude scale. There maybe a need for further research that will try to answer the question of, what constitute the multicultural attitude in a vulnerable population? Unfortunately, our tested model did not fit well to the data as important values were above the recommendations CFI = .94, RMSEA = .08 and SRMR = .04. Indeed there were evidence of the predicting effect of social support, self-efficacy and multicultural attitude on coping with stress among

asylum seekers despite the bad fit of the model. Therefore empowering these predictors maybe beneficial in coping with stress and stress related disorders.

Chapter 6

There is an advantage of incorporating the multicultural attitude into the coping process of refugees and asylum seekers. In most cases, social support as a coping facilitator has taken an upper hand in the research of stress and coping. Although, attention has been turn to the multicultural variable, little is been done to practically assess the interaction effect of multicultural attitude and coping with stress. Furthermore, people with a good and positive multicultural attitude are believed to have a healthy integration to societies. Therefore the pressing issue consists of searching for those variables that can enhance the multicultural attitude itself. Social support and self-efficacy have been identified as good potential predictors of multicultural attitude. Moreover, refugees and asylum seekers forms one of the suitable population for which such interactions can be investigated. Firstly, we assessed the feasibility of the research with these variables. Base on item endorsements, it was evident that the research was feasible. Secondly, we assessed a psychological model with social support and self-efficacy as predictors of multicultural attitude among asylum seekers. As expected, there was a positive relationship between all the sub-scales included in the study. Although none of the interaction did cross the larger effect size values, evident of good relationship was established. After validating the social support questionnaires, multicultural attitude questionnaires and self-efficacy questionnaires at $N = 221$, we proceeded by evaluating the constructed model. Preliminary, Confirmatory Factor Analysis (CFA) was performed. All specified paths correlated positively and significantly. That is, social support correlate with multicultural attitude at $r = .21$ $p < .001$, coping self-efficacy and multicultural attitude at $r = .16$ $p < .001$, social support and coping self efficacy at $r = .56$ $p < .001$. Despite this positive relationship the model did not fit to the data with some fit indices above the recommended values CFI = .91, RMSEA = .14, SRMR = .05. With the regression analysis model, specified paths loaded positively and significantly. That is, social support and self-efficacy simultaneously predict multicultural attitude at $\beta = .28$ $p < .01$, $\beta = .25$ $p < .01$ respectively. As expected, self-efficacy equally predicts social support at $\beta = .68$ p

< .001. Remarkably, social support and self-efficacy were predicting multicultural attitude at small regression values. This unexpected result further reinforces the question of, “What are the psychological preconditions that constitute multicultural attitude”. Once more, there is a need for further study that can help in re-establishing the psychological characteristics that constitutes multicultural attitude. It may also be that multicultural attitude in a refugee population is perceived differently. Therefore such a research should be carried out within the refugee and asylum seekers sample.

Chapter 7

A good quality of life among refugees and asylum seekers is what mental health professionals working with this vulnerable group always drive for. A good quality of life entails a good resilience and healthy psycho-social integration into the host country society. In light of this, there is always a search for approaches that can help in building and maintaining a good quality of life among vulnerable population. Social support and adaptive coping are always cited as good enhancers of quality of life. In this chapter, we assessed psycho-social model with social support and adaptive coping acting as predictors of quality of life. At the same time, gender, marital status and length of stay in the host country effect were investigated against all sub-scales of quality of life and ways of coping both at the univariate and multivariate level. Asylum seekers (N = 221) responded to ways of coping questionnaires, quality of life and multidimensional scale of perceived social support. All the Cronbach’s alpha values for each sub-scale were above .70. These values are widely accepted for research purposes. Moreover, correlation values of all sub-scales range from fair to good. With the help of *t*-test statistics, it turns out that females significantly score high in the social relationship sub-scale of the quality of life as compared to men. Also, males significantly believed their physical health, environmental situation were far better than that of females. When marital status was check against all the four sub-scales of quality of life, there was no significant interaction except for psychological health where single asylum seekers significantly outweigh their counterparts with higher mean scores. Unexpectedly, length of stay in the host country did not yield any significant results against all the sub-scales of quality of life although there were slight differences in mean scores. Multivariately speaking, there was evident

of significant interaction of gender and marital status with all the sub-scales of ways of coping and quality of life. However only gender with social relationship from the scale of quality of life did yield significant results at the univariate follow up testing with females obtaining higher mean scores than men. Furthermore, Confirmatory Factor Analysis (CFA) did yield interesting results with all specified paths correlating with each other at $p < .001$. The results here stood at, the path with social support and coping yields a correlation of $r = .55$, $p < .001$. At the same time, social support and coping correlated with quality of life at $r = .41$ $p < .001$ and $r = .21$, $p = < .001$ respectively. However the CFA model did not fit well to the data with the following fit indices CFI = .90, RMSEA = .10, SRMR = .04. With the above established relationship, a latent regression structural model was computed. Specified paths loaded positively and significantly at $p<.001$. That is, social support significantly predict coping at $\beta = .59$ $p < .001$. Equally, social support and coping significantly predict quality of life at $\beta = .54$ $p < .001$ and $\beta = .27$ $p < .001$ respectively. The evaluated latent model did not fit well to the data with fit indices as follows: CFI = .93, RMSEA = .10, SRMR = .04. These fit indices are above the recommended values. Results from this model shows that good coping and social support are indeed indispensable for a good quality of life among refugees seekers and asylum seekers.

Chapter 8

Treatment of stress related disorders remains an important focus among mental health care practitioners working with the aimed of restoring a good metal heath life in refugees and asylum seekers population. Many types of treatment approaches are used with their success stories told, however we know little about why there is no homogeneity in treatment approaches. Also, the used of treatment indicators have been so limited to an extend where one can only relate stress with PTSD, anxiety and depression. Finally there is no knowledge on how each treatment approach empowers refugees and asylum seekers. We systematically review the literature to identify the types of treatment approaches that are working well in this vulnerable population. At the same time, we explored the weaknesses of these approaches by proposing innovative ideas. The main types of treatment approaches were Cognitive Behavioral Therapy (CBT), Narrative

Exposure Therapy (NET), Trauma Focus Psychotherapy (TFP), group therapy, psycho-pharmacotherapy. Single handed approaches such as musical therapy, social support, imagery rescripting and though field therapy were also identified. In majority of these treatments, CBT took an upper hand in the effective treatment of PTSD. However there were evidence of the benefits when the treatment were combine with some pharmacological approach especially as depression and general anxiety were greatly reduced. There were generally great reductions in PTSD, anxiety and depression symptoms when multiple treatment approaches were used simultaneously. Surprisingly, we found only one study that did gender orientation treatment despites the calls for the inclusion of demographic variables in the treatment of stress related disorders. Other treatment approaches were shown to yield positive results in reducing PTSD, anxiety and depression. Although some studies reaches conclusion with effect size values calculations, we did calculate these values when it was possible. The highest effect size value (d = 3.94) was obtained for treatment of PTSD, anxiety and depression with multimodal, trauma focus and group therapy. As expected, none of the studies did mention the aspect of empowering these vulnerable populations in dealing with their related stress disorders. Treatment focus mainly on PTSD, anxiety and depression. Post-migration stresses were neglected. Moreover, we showed in chapter 3 that asylum seekers were victims of post-migration stress and Post-Traumatic Embitterment Disorders (PTED). Given the continues evidence that post-migration stress trigger, relapse and make it difficult for the treatment of stress related disorders such as PTSD, anxiety and depression, there is an urgent need to integrate it as one of the indicator of treatment outcome. Moreover the presence of PTED (chapter 3) also called for further inclusion in the treatment of stress related disorders. Moreover, we strongly believed that the presence of quality of life as an indicator in the treatment process will be of an added value. In this case, social support and adaptive coping maybe used to assured a good quality of life (chapter 6). There is also a growing concern that multicultural attitude maybe influencing the ways individuals manage their stress. In light of this, a good multicultural attitude may entail a good level of coping with stress strategies (chapter 4). Given all these, there is a need to look to treatment of stress and related disorders as an empowerment. That is, putting in place all necessary resources required by refugees and asylum seekers in

coping with stress related disorders and thus living a good quality of life. Therefore coping as an indicator is essential for the proper investigation of treatment of stress related disorders among refugees and asylum seekers.

Chapter 9

We discussed the conclusion with regard to the practical implications generated by each objective. That is, practical approaches in managing various stressors among refugees and asylum seekers, implementation of social support in asylum centers and the extension of stress related mental disorders treatment indicators. Achieving a good visibility and effectiveness in the mental healthcare system of refugees and asylum seekers, we proposed a state of the art stepped care approach. In summary, the main implications of our research for clinical practice are the following.

- Post-migration stressors together with post-traumatic embitterment disorders should be included in the treatment process of stress related disorders among refuges and asylum seekers.
- Social support should be installs in asylum centers such as to help refugees found adaptive ways of coping with stress thus increasing their quality of life
- Multicultural attitude of refugees and asylum seekers should be occasionally screen such as to identify those in need of social support and good level of self-efficacy that can help in bursting the multicultural attitude.
- Treatment of refugees and asylum seekers has to go beyond post traumatic stress disorders, depression and anxiety. Quality of life, ways of coping, multicultural attitude and post-traumatic embitterment disorders should be used as additional treatment indicators.
- A stepped care approached consisting of providing security, stability, preventive mental health care with community and professionals and curative mental health care with professional should be practiced.

Implications for further research were discussed, for example there is a need for a longitudinal study such as to established the stability of our findings. Given our stepped care model proposition, there is a need for a pilot study that will test the model before implementation.

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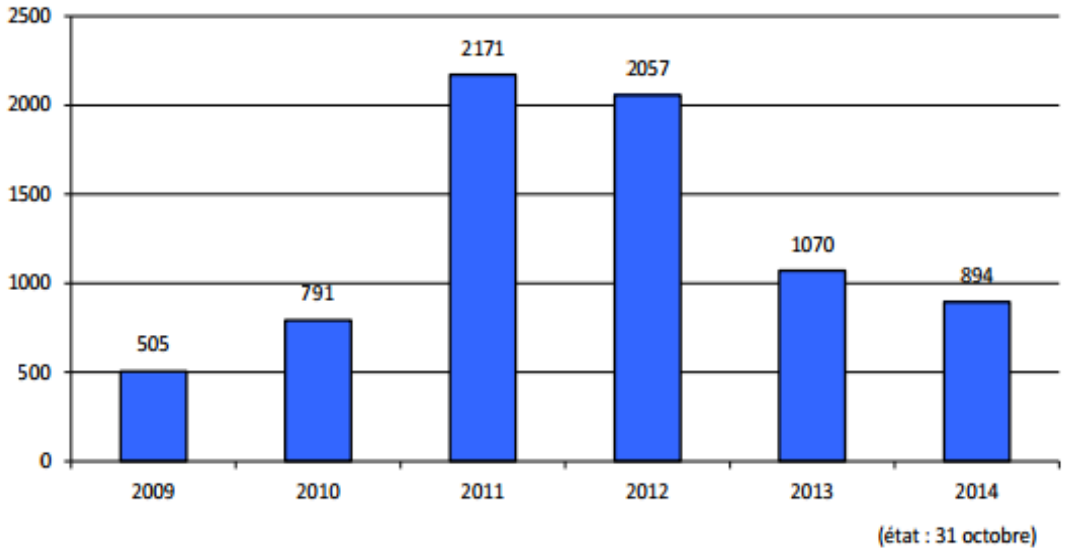
ANNEX

ANNEX 1 - Evolution of asylum seekers in Luxembourg from 2006 to 2014

Evolution in number of asylum seekers for the past 6 years



Asylum decisions taken in 2014

Source: Ministry of external affair Luxembourg, (2014)

2. Décisions prises en 2014

Type de décision	Jan	Fév	Mar	Avr	Mai	Juin	Juil	Août	Sept	Oct	Nov	Déc	Total
Reconnaissance du statut de réfugié	8	17	16	3	9	14	3	4	10	15			99
Attribution du statut conféré par la protection subsidiaire	6	2				10	5		3	4			30
Refus de la protection internationale	86	44	43	73	60	69	80	29	47	72			603
Retraits implicites		4	1	22	7		1	2		1			38
Incompétence	37	65	19	6	9	4	7	20	10[1]	14			191
Irrecevabilité (Art.16) *	1	1	1	1			3			1			8
Irrecevabilité (Art.23) *		8	14	1	8	7	1	8	3	9			59
Exclusion													0
Révocation du statut													0
Décisions prises	138	141	94	106	93	104	100	63	71	116			1028
Renonciations	12	16	16	13	4	4	1	6	5	4			81

* ***Irrecevabilité (Art.16)*** *: concerne les citoyens de l'UE et les personnes provenant d'un pays tiers sûr ou pour lesquels il existe déjà un premier pays d'asile*
Irrecevabilité (Art.23) *: concerne les personnes dont la demande multiple a été déclarée irrecevable*

[1] Rectification pour septembre 2014 : ajout de 2 personnes dans la ligne « Incompétence » qui n'avaient pas été enregistrées auparavant.

e. Pays d'origine ou de provenance des personnes ayant demandé une protection internationale en 2014 (état : 31 octobre)

	Pays d'origine	Nombre de personnes	Pourcentage par rapport au total des demandes de 2014
1	Bosnie-Herzégovine	128	14,32 %
2	Kosovo	117	13,09 %
3	Monténégro	112	12,53 %
4	Albanie	103	11,52 %
5	Syrie	78	8,72 %
6	Serbie	49	5,48 %
7	Algérie	34	3,8 %
8	Erythrée	31	3,47 %
9	Tunisie	30	3,36 %
10	Nigéria	25	2,8 %
	Autres	187	20,92 %
	Total	894	100 %

Source: Ministry of external affair Luxembourg, (2014)

ANNEX 2 - Interview Questionnaires on Stressors

Semi-structured interview **CODE……**

1. Protocol

- Self introduction
- Purpose of studies
- Interview structure (notes taking & audio recording)
- Ask participants if they have any questions
- Test recording and writing equipments
- Take note of your verbal as well as non verbal behavior to let participants fell free

2. Socio-demographic information

- Gender……..
- Age……
- Level of education…….
- Profession…….
- Marital situation……..
- Family situation (came to Luxembourg with children)……..
- Country of Origin……
- Number of years (months) spent in Luxembourg……
- Language spoken in Luxembourg……
- Name of social organization providing assistance in Luxembourg ……..
- Refugee …….or asylum seeker……

3. Questions on acculturation

- How do you describe yourself, a Person from the original country or Luxembourgish or both?
- How do your life at home here in Luxembourg differ or relate to that of people not from your country?
- Going further could you tell me the differences between your own culture and the one in Luxembourg?
- How do experiences from these differences in culture make things difficult or easy for you?
- Do you have friends here that are not from your country of Origin? Who is your closet friend? and where does he/she come from?
- How do you see yourself feeling more Luxembourgish in the future?

4. Questions on administration system

- How do you think the administration is helping or not helping you?

5. Economic questions

- How are you satisfy or dissatisfy with your financial situation in Luxembourg?

6. Social questions

- How is your family helping you at this moment?
- How do you think the social organizations in Luxembourg are helping you?
- How do you receive support from friends?
- How do you engage yourself in doing some sport, art work, music?
- How do you offer your assistance to other people in the same situation like you?

Entretien semi-structuré **CODE…….**

1. Protocol

- Auto introduction
- Objectif des etudes
- structure d'entretien (prise de notes et l'enregistrement audio)
- Demandez aux participants si elles ont des questions
- Testez votre appareil d'enregistrement et d'écrire
- Faites attention à votre comportement verbale et non verbale pour que les participants peut être à l'aise

2. Données sociodémographiques

Genre……..

Age……

Niveau d'éducation…….

Profession…….

Situation matrimoniale……..

Situation familiale……..

Pays d'origine……

Nombre d'années passées au Luxembourg……

Langue parlée au Luxembourg……

Affiliation à une organisation au Luxembourg en vue de l'aide sociale

……..

Réfugié ……ou demandeur d'asile ……

3. Questions sur l'acculturation

- Comment vous décririez-vous? une Personne du pays d'origine ou Luxembourgeoise?
- Comment votre vie au Luxembourg diffère-t-elle de celle de votre pays d'origine?
- Quelle est la différence entre votre propre culture et celle du Luxembourg?
- Comment cette différence culturelle vous rend elle la vie facile ou difficile?
- Avez-vous ici des amis proches qui ne viennent pas de votre pays origine?
- De quelle manière pourriez-vous vous sentir plus proche des Luxembourgeois à l'avenir?

4. Questions sur l'administration

- Comment jugez-vous l'aide qui vous a été accordée par l'administration?

5. Question sur la situation financière

- À quel point êtes-vous satisfait ou insatisfait de votre situation financière au Luxembourg?

6. Question sur le soutien social

- Comment votre famille vous aide-t-elle en cette période?
- Quel est votre avis sur les aides qui vous ont été accordées par les organisations sociales du Luxembourg ?
- Comment recevez-vous du soutien de la part de vos amis?
- De quelle manière êtes-vous arrivé à pratiquer les activités sportives avec les autres ?
- Comment offrez- vous votre assistance à des personnes qui se trouvent dans la même situation que vous?

ANNEX 3 – Post-Traumatic Embitterment Disorders (PTED) Instrument

Please read the following statements and indicate to what degree they apply to you. Please do not miss a line. During the last years there was a severe and negative life Event.

I agree with these statements

	Not true At all	Hardly true	Partially true	Very much true	Extremely true
That hurt my feelings and caused considerable embitterment	0	1	2	3	4
…/ /					
That I see as very unjust and unfair?	0	1	2	3	4
About which I have to think over and over again	0	1	2	3	4
…/ /					
That triggers me to harbor thoughts of revenge	0	1	2	3	4
For which I blame and am angry with myself?	0	1	2	3	4
…/ /					

That makes me to frequently feel sullen and unhappy	0	1	2	3	4
That impaired my overall physical well being	0	1	2	3	4
…/ /					
That led to a considerable decrease in my strength and drive	0	1	2	3	4
That made that I am more easily irritated than before	0	1	2	3	4
That makes that I must distract myself in order to experience a normal mood	0	1	2	3	4
That made me unable to pursue occupational and/or family activities as before	0	1	2	3	4
That caused me to draw back from friends and social activities	0	1	2	3	4
Which frequently evokes painful memories	0	1	2	3	4

ANNEX 4 - English Version of Quantitative Data Collection Instrument

CODE……

Université de Lorraine – Metz

Unité de recherche

Maladies chronique, santé perçue et processus d'adaptation: Approches épidémiologiques et psychologiques

Studies on stress, coping and quality of life

We are very grateful that you are sacrificing your time to take part in this scientific study. The study objective is to analyzed stress coping strategies among refugees and asylum seekers in Luxembourg while taking into consideration the social support, auto-efficacy and the multicultural variable.

You will answer four types of questionnaires.

In order to assure the validity of this scientific research, we plead on you to fill the questionnaire with much attention as possible.

All your responses remain exclusively anonymous.

Contact

Ndzebir Andrew Vernyuy

E.Mail :andrew.ndzebir@umail.univ-metz.fr

Tel: 00352691690365

General instruction

Please read carefully each question/affirmation and chose the responses that best correspond to you. We plead on you to spontaneously provide your responses. In case of doubt on a particular question, please provide responses base on your experience.

IMPORTANT

There are neither rights nor wrong responses

Please do provide responses to all the questions

Your answers are very important to us

We once more thank your for participating in this study. We plead on you to response to all questions concerning your socio-demographic situation before proceeding to the questionnaires. The results from this study will be purposely for scientific research. All the answers provided will be handled with strict confidentiality.

A. What is your age?.....Years

B.What is your Gender……..Female ……..Male

C.What is your mother tongue language?.....

D.Put a cross beside the affirmation that best describe your situation

I master well the English language……

I master the English language…….

I averagely know English Language……

E.What is your nationality?.....

F.What is the level of your study?

- No certificate
- CATP, CITP or CCM
- Secondary school diploma (BAC, Advance level certificate etc)
- Bachelor's Degree or equivalent
- Master's degree or Equivalent

G.What is your present profession?.....

H.What is your present situation?

Refugee…….

Asylum seeker……..if yes continue to the following questions

For how long have you been waiting for the response of your asylum application in Luxembourg……..

I. For how long have you been residing in Luxembourg……..

J.Did you came to Luxembourg with your family?.....

K.What is your marital situation……Married…….Single……..Divorce

L.Are you attached to any organization in Luxembourg for social support?.....if yes which one(s) in particular……..

Given the multicultural nature of Luxembourg, the following questions seek to know the degree by which you act, care or know about multicultural values. Being in a multicultural context, to how extend do you agrees or disagrees with the following affirmations.

Munroe Multicultural Attitude Survey Questionnaire (MASQUE)	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree
1. I know that social barriers exist.	1	2	3	4	5	6
2. I understand religious belief differ.	1	2	3	4	5	6
3. I actively challenge gender inequities.	1	2	3	4	5	6
4. I react positively to cultural differences.	1	2	3	4	5	6
5. I understand sexual preferences may differ.	1	2	3	4	5	6
6. I care about respecting diverse cultural values.	1	2	3	4	5	6
7. I know that the disabled are equal to the abled.	1	2	3	4	5	6
8. I feel supportive of people's sexual orientation.	1	2	3	4	5	6
9. I am sensitive to respecting religious differences.	1	2	3	4	5	6
10. People's social status does not effect how I care about them.	1	2	3	4	5	6
11. I am not passionately committed to ending gender inequities.	1	2	3	4	5	6
12. I accept the fact that languages other than my mother tongue are spoken.	1	2	3	4	5	6
13. I do not understand why people of other cultures act differently.	1	2	3	4	5	6
14. I act the same with everyone, regardless of his or her income status.	1	2	3	4	5	6
…//						

16. I am not equally sensitive to people with disabilities as people with abilities.	1	2	3	4	5	6
17. Upon request, I equally assist people with abilities as people with disabilities.	1	2	3	4	5	6
18. I respectfully help others to offset language barriers that prevent communication.	1	2	3	4	5	6
19. I do not take action when witnessing bias based on people's preferred sexual orientation.	1	2	3	4	5	6
…/ /						

Ways of Coping Questionnaires (WCQ)

Given your situation as a refugee or asylum seeker, the following question seeks to know the process by which you cope with various stressors. When things are difficult for you as a refugee or asylum seekers, to how extend do you used the following coping strategies:

	Ways of Coping Questionnaires (WCQ)	Not used	Used somewhat	Used quite a bit	Used a great deal
1	Just concentrated on what I had to do next – next step.	1	2	3	4
2	I tried to analyze the problem in order to understand it better.	1	2	3	4
3	Turned to work or substitute activity to take my mind off things.	1	2	3	4
17	I expressed anger to the person(s) who caused the problem.	1	2	3	4
18	Accepted sympathy and understanding from someone.	1	2	3	4
19	I told myself things that helped me to feel better.	1	2	3	4
20	I was inspired to do something creative.	1	2	3	4
21	Tried to forget the whole thing.	1	2	3	4
22	I got professional help.	1	2	3	4
23	Changed or grew as a person in a good way.	1	2	3	4
…//					
25	I apologized or did something to make up.	1	2	3	4
26	I made a plan of action and followed it.	1	2	3	4
…//					
42	I asked a relative or friend I respected for advice.	1	2	3	4

43	Kept others from knowing how bad things were.	1	2	3	4
44	Made light of the situation; refused to get too serious about it.	1	2	3	4
45	Talked to someone about how I was feeling.	1	2	3	4
46	Stood my ground and fought for what I wanted.	1	2	3	4
47	Took it out on other people.	1	2	3	4
48	Drew on my past experiences; I was in a similar situation before.	1	2	3	4
49	I knew what had to be done, so I doubled my efforts to make things work.	1	2	3	4
50	Refused to believe that it had happened.	1	2	3	4
51	I made a promise to myself that things would be different next time.	1	2	3	4
52	Came up with a couple of different solutions to the problem.	1	2	3	4
53	Accepted it, since nothing could be done.	1	2	3	4
54	I tried to keep my feelings from interfering with other things too much.	1	2	3	4
…//					

Coping Self-Efficacy Scale (CSES)

When things aren't going well for you, or when you're having problems, how confident or certain are you that you can do the following:

Cannot do at all					Moderately certain can do					Certain can do
0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**

For each of the following items, write a number from 0 – 10, using the scale above.

When things aren't going well for you, how confident are you that you can:

1. Keep from getting down in the dumps.	
2. Talk positively to yourself.	
3. Sort out what can be changed, and what cannot be changed.	
4. Get emotional support from friends and family.	
5. Find solutions to your most difficult problems.	
6. Break an upsetting problem down into smaller parts.	
…//	
17. Get friends to help you with the things you need.	
18. Do something positive for yourself when you are feeling discouraged.	
19. Make unpleasant thoughts go away.	
20. Think about one part of the problem at a time.	
21. Visualize a pleasant activity or place.	
22. Keep yourself from feeling lonely.	
23. Pray or meditate.	
…//	

Multidimensional Scale of Perceived Social Support (MSPSS)

We are interested in how you feel about the following statements. Please read each statement carefully. Indicate how you feel or your experience about each statement.

Multidimensional Scale of Perceived Social Support (MSPSS)	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree
1. There is a special person who is around when I am in need.	1	2	3	4	5	6
2. There is a special person with whom I can share my joys and sorrows.	1	2	3	4	5	6
3. My family really tries to help me.	1	2	3	4	5	6
4. I get the emotional help and support I need from my family.	1	2	3	4	5	6
…//						
7. I can count on my friends when things go wrong.	1	2	3	4	5	6
8. I can talk about my problems with my family.	1	2	3	4	5	6
9. I have friends with whom I can share my joys and sorrows.	1	2	3	4	5	6
..//						
11. My family is willing to help me make decisions.	1	2	3	4	5	6
12. I can talk about my problems with my friends.	1	2	3	4	5	6

WHOQOL-BREF

Please read each question, assess your feelings, and circle the number on the scale for each question that gives the best answer for you. There are neither rights nor wrong answers.

	Very poor	Poor	Neither poor nor good	Good	Very good
How would you rate your quality of life?	1	2	3	4	5

	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
How satisfied are you with your health?	1	2	3	4	5

	Not at all	A little	A moderate amount	Very much	An extreme amount
To what extent do you feel that physical pain prevents you from doing what you need to do?	1	2	3	4	5
How much do you need any medical treatment to function in your daily life?	1	2	3	4	5
How much do you enjoy life?	1	2	3	4	5
To what extent do you feel your life to be meaningful?	1	2	3	4	5

…//					
Are you able to accept your bodily appearance?	1	2	3	4	5
Have you enough money to meet your needs?	1	2	3	4	5
How available to you is the information that you need in your day-to-day life?	1	2	3	4	5
To what extent do you have the opportunity for leisure activities?	1	2	3	4	5

	Very poor	Poor	Neither poor nor good	Good	Very good
How well are you able to get around?	1	2	3	4	5

	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
How satisfied are you with your sleep?	1	2	3	4	5
How satisfied are you with your ability to perform your daily living activities?	1	2	3	4	5
..//					
How satisfied are you with the conditions of your living place?	1	2	3	4	5
How satisfied are you with your access to health services?	1	2	3	4	5
How satisfied are you with your transport?	1	2	3	4	5
…//					

ANNEX 5 - French Version of Quantitative Data Collection Instrument

CODE……

Université de Lorraine – Metz

Unité de recherche

Maladies chronique, santé perçue et processus d'adaptation: Approches épidémiologiques et psychologiques

Etude sur le stress, le coping et qualité de vie

Nous vous remercions d'avoir accepté de participer à cette étude scientifique. Cette étude a pour but l'analyse des stratégies d'ajustement au stress en tenant compte du soutien social, de l'auto-efficacité et de l'attitude multiculturelle.

Vous allez devoir répondre à 4 types de questionnaires différents.

Afin de garantir des résultats pertinents pour la recherche, nous vous prions de travailler de manière concentrée et sérieuse.

Toutes les réponses aux questionnaires sont anonymes.

Contact
Ndzebir Andrew Vernyuy
E.Mail :andrew.ndzebir@umail.univ-metz.fr
Tel: 00352691690365

Instructions générales

Lisez attentivement chaque question/ affirmation et choisissez la réponse qui vous correspond le mieux. Essayez de répondre spontanément et assez rapidement. Si vous hésitez, donnez la réponse qui vous correspond le mieux ou qui vous correspond la plupart du temps.

IMPORTANT

Il n'y pas de bonnes ou de mauvaises réponses

Veuillez répondre à toutes les questions, S.V.P

Vos réponses sont très importantes pour nous.

Nous vous remercions de participer à cette étude. Nous vous prions de répondre à toutes les questions concernant votre personne et de procéder par la suite aux questionnaires. Les résultats serviront à une recherche scientifique. Les réponses sont tout à fait anonymes

A. Quel âge avez-vous ?..... …….ans

B. Quel est votre genre ?.....……..féminin……..masculin

C. Quelle est votre langue maternelle ?……

D. Mettez une croix pres de l'affirmation qui correspond à votre cas :

- Je maîtrise parfaitement la langue française……
- Je maîtrise la langue française…….
- Je maîtrise moyennement la langue française…….

E. Quelle est votre nationalité ?.....

F. Quel est votre niveau d'étude ?

- Pas de certificat
- CATP, CITP ou CCM
- Diplôme de fin d'études secondaires (technicien, techniques ou classiques)
- Université-1er cycle (Licence ou équivalent)
- Université-2^{e} cycle (Master ou équivalent)

G. Quelle est votre profession actuelle?.....

H. Quelle est votre situation actuelle ?

- Refugié…….
- Demandeur d'asile……..Si oui répondez aux questions suivantes :

Depuis combien de mois ou d'années avez-vous introduit une demande d'asile au Luxembourg ?.....

I. Depuis combien d'années ou de mois êtes-vous au Luxembourg ?.....

J. Etes-vous venu au Luxembourg avec votre famille……Seul……..

K. Quelle est votre situation matrimoniale ……Marié.....Célibataire……..Divorcé

L. Etes-vous affilié au Luxembourg à une organisation en vue d'une aide sociale……

M. Si oui,

laquelle…….

Questionnaire de Munroe sur l'Attitude Multiculturelle (MASQUE)

Etant donné la situation multiculturelle du Luxembourg, les questions suivantes cherchent à connaître le degré de vos activités, préoccupations et connaissances en rapport avec les valeurs multiculturelles. Etant dans un contexte multiculturel, à quel degré êtes-vous d'accord ou en désaccord avec les affirmations suivantes:

Questionnaire de Munroe sur l'Attitude Multiculturelle (MASQUE)	Fortement en désaccord	En désaccord	Plutôt en désaccord	Plutôt d'accord	D'accord	Fortement d'accord
1. Je suis conscient que le racisme existe.	1	2	3	4	5	6
2. Je n'agis pas contre le racisme.	1	2	3	4	5	6
3. Je sais que les barrières sociales existent.	1	2	3	4	5	6
4. Je suis conscient que les croyances religieuses diffèrent.	1	2	3	4	5	6
5. Je suis émotionnellement préoccupé par l'inégalité raciale.	1	2	3	4	5	6
6. Je ne suis pas gêné par l'utilisation d'une langue différente de la mienne.	1	2	3	4	5	6
7. Je suis sensible envers les gens ayant une situation financière différente.	1	2	3	4	5	6
8. Je ne lutte pas contre les préjugés religieux.	1	2	3	4	5	6
9. Je ne comprends pas l'engagement des gens pour les valeurs ethniques.	1	2	3	4	5	6
10. Le statut social des gens n'affecte pas la manière dont je me soucie d'eux.	1	2	3	4	5	6
…//						

12. J’accepte le fait que des langues différentes de la mienne soient parlées.	1	2	3	4	5	6
13. Je ne comprends pas pourquoi les gens d'autres cultures agissent de manière différente.	1	2	3	4	5	6
14. J’agis de la même manier avec tout le monde, quel que soit le statut de ses revenus.	1	2	3	4	5	6
15. Je connais les différences entre les classes économiques.	1	2	3	4	5	6
16. J’aide poliment les autres à compenser les barrières linguistiques qui empêchent la communication.	1	2	3	4	5	6
17. Je n’agis pas face aux préjugés contre l'orientation sexuelle des personnes.	1	2	3	4	5	6
..//						

Questionaire sur strategies d'ajustement (WCQ)

Compte tenu de votre situation en tant que réfugié ou demandeur d'asile, la question suivante cherche à connaître de quelle manière vous faites face à différents facteurs de stress. Quand les choses sont difficiles pour vous, en tant que réfugié ou demandeur d'asile, jusqu' à quel degré utilisez vous les stratégies d'ajustement suivantes.

	Questionaire sur strategies d'ajustement (WCQ)	Non utilisé	Utilisé peut	Utilisé un peu	Largement utilisés
1	J'ai été concentré sur ce que j'avais à faire- la prochaine étape.	1	2	3	4
2	J'ai essayé d'analyser le problème afin de mieux le comprendre.	1	2	3	4
3	J'ai travaillé ou changé mon activité pour oublier mes soucis.	1	2	3	4
12	J'ai garde l'espoir, parfois j'ai juste de la malchance.	1	2	3	4
13	J'ai continué comme si rien ne s'était passé.	1	2	3	4
14	J'ai essayé de garder mes sentiments pour moi-même.	1	2	3	4
15	J'ai essayé de regarder le bon côté des choses.	1	2	3	4
16	J'ai dormi plus que d'habitude.	1	2	3	4
17	J'ai exprimé ma colère face à la (aux) personne (s) qui était (ent) la cause du problème.	1	2	3	4
18	J'ai accepté la sympathie et la compréhension de quelqu'un.	1	2	3	4
19	Je me disais des choses qui m'ont aidé à me sentir mieux.	1	2	3	4
20	Je me suis poussé à faire quelque chose de créatif.	1	2	3	4

24	J'ai attendu de voir ce qui se passerait avant de faire quoi que ce soit.	1	2	3	4
…//					
31	J’ai parlé à quelqu'un qui pouvait faire quelque chose de concret par rapport au problème.	1	2	3	4
32	Je me suis éloigne de ce problème pendant un certain temps; j’ai essayé de me reposer ou de prendre des vacances.	1	2	3	4
33	J'ai essayé de me sentir mieux en mangeant, buvant, fumant, en utilisant des drogues ou des médicaments.	1	2	3	4
34	J’ai essayé ma chance en prenant un grand risque.	1	2	3	4
35	J'ai essayé de ne pas agir trop précipitamment ni de suivre ma première impulsion.	1	2	3	4
36	J’ai suis abouti à une nouvelle conviction.	1	2	3	4
37	J’ai maintenu ma fierté et je me suis affirmé.	1	2	3	4
38	J’ai redécouvert ce qui est important dans la vie.	1	2	3	4
39	J’ai changé quelque chose de telle sorte que la situation allait tourner bien.	1	2	3	4
40	J’ai évité généralement d'être avec les autres.	1	2	3	4
41	Je me suis protégé; j’ai refusé de trop penser au problème.	1	2	3	4
42	J'ai demandé conseil à une personne de la famille ou à un ami que je respectais.	1	2	3	4
43	J’ai évité de faire connaître ma mauvaise situation aux autres.	1	2	3	4
44	J’ai pris la situation à la légère, j’ai refusé de devenir trop préoccupé par ce sujet.	1	2	3	4
45	J’ai dit à quelqu'un comment je me sentais.	1	2	3	4
46	J’ai résisté et combattu pour ce que je voulais.	1	2	3	4
47	J’ai délégué à d'autres personnes	1	2	3	4

48	J’ai appris de mes expériences passées, j'ai été dans une situation similaire avant.	1	2	3	4
49	Je savais ce qui devait être fait, j'ai donc doublé mes efforts pour faire face à la difficulté.	1	2	3	4
50	J’ai refusé de croire que c'était arrivé.	1	2	3	4
51	Je me suis promis que les choses seraient différentes la prochaine fois.	1	2	3	4
…//					
62	J’ai pensé à ce que j’allais dire ou faire	1	2	3	4
63	J'ai pensé à la façon dont une personne que j'admire saurait gérer cette situation et je l'a utilisée comme un modèle.	1	2	3	4
64	J'ai essayé de voir les choses du point de vue d’autrui.	1	2	3	4
65	Je me suis rappelé à quel point les choses pourraient être pires.	1	2	3	4
66	J'ai fait du jogging ou de l’exercice physique.	1	2	3	4

Échelle auto-efficacité d'ajustement (CSES)

Quand les choses ne vont pas bien pour vous, ou lorsque vous rencontrez des problèmes, à quel point êtes-vous confiant ou certain que vous pouvez effectuer les opérations suivantes

Pas du tout				Modérément						Relativement
0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**

Pour chacun des éléments suivants, écrivez un nombre de 0 – 10, en utilisant l'échelle ci-dessus. Quand les choses ne vont pas bien pour vous, à quel point êtes-vous sûr que vous pouvez :

1.Éviter de perdre la stabilité.	
2. Parler positivement à vous-même.	
3. Vérifiez ce qui peut être changé et ce qui ne peut pas être changé.	
4. Obtenir un soutien affectif de vos amis et de votre famille.	
…//	
17. Demander à vos amis de vous aider avec ce dont vous avez besoin.	
18. Faire quelque chose de positif pour vous-même quand vous vous sentez découragé.	
19. Faire disparaître les pensées désagréables.	
20. Penser à une partie du problème à la fois.	
21. Visualiser une activité ou un lieu agréable	
22. Éviter de vous sentir seul.	
23. Prier ou méditer.	
24. Obtenir un soutien émotionnel d'un organisme communautaire.	
25. Résister et vous battre pour ce que vous voulez.	
26. Résister à la tentation d'agir violemment lorsque vous êtes sous pression.	

Multidimensional Scale of Perceived Social Support (MSPSS)

Les questions suivantes portent sur les gens dans votre environnement qui vous apportent de l'aide ou du soutien. Répondre par rapport a votre l'expérience.

Multidimensional scale of perceived social support (MSPSS)	Fortement en désaccord	En désaccord	Plutôt en désaccord	Plutôt d'accord	D'accord	Fortement d'accord
1. Il est une personne spéciale qui est là quand je suis dans le besoin.	1	2	3	4	5	6
2. Il est une personne spéciale avec qui je peux partager mes joies et les douleurs.	1	2	3	4	5	6
3. Ma famille fait les efforts pour m'aider.	1	2	3	4	5	6
4. Je reçois le soutien affectif et de support j'ai besoin de ma famille.	1	2	3	4	5	6
…//						
10. Il est une personne spéciale dans ma vie qui se soucie des mes sentiments	1	2	3	4	5	6
11. Ma famille est prête à m'aider à prendre des décisions	1	2	3	4	5	6
12. Je peux parler de mes problèmes avec mes amis	1	2	3	4	5	6

WHOQOL-BREF

Les questions suivantes expriment des sentiments sur ce que vous éprouvez actuellement. Aucune réponse n'est juste, elle est avant tout personnelle.

		Très faible	Faible	Ni faible ni bonne	Bonne	Très bonne
1	Comment évaluez-vous votre qualité de vie?	1	2	3	4	5

		Très insatisfait(e)	Insatisfait(e)	Ni satisfait(e) ni insatisfait(e)	Satisfait(e)	Très satisfait(e)
2	Etes-vous satisfait(e) de votre santé?	1	2	3	4	5

		Pas du tout	Un peu	Modérément	Beaucoup	Extrêmement
3	La douleur physique vous empêche-t-elle de faire ce dont vous avez envie?	1	2	3	4	5
4	Avez-vous besoin d'un traitement médical quotidiennement?	1	2	3	4	5
5	Aimez-vous votre vie?	1	2	3	4	5
..//						
9	Vivez-vous dans un environnement sain?	1	2	3	4	5
10	Avez-vous assez d'énergie dans votre vie quotidienne?	1	2	3	4	5

11	Acceptez-vous votre apparence physique?	1	2	3	4	5
12	Avez-vous assez d'argent pour satisfaire vos besoins?	1	2	3	4	5
13	Avez-vous accès aux Informations nécessaires pour votre vie quotidienne?	1	2	3	4	5
…//						

ANNEX 6 – Complementary information

Correlation of latent psychological variables in the model with MSPSS, MASQUE, WCQ and CSES

There was evident of the relationship that exists between social support, multicultural attitude, coping and self-efficacy. As indicated by the Confirmatory Factor Analysis (CFA), this relationship was higher between self-efficacy and coping with stress. For example a factor loading of .71 was obtained. This high value may also signal a poor discriminate validity between self-efficacy and coping although the cut off point is .85. That is, these two measures do not differ from each other to a great deal. This maybe link to the fact that some items in self-efficacy closely resemble the ones in ways of coping although they are mean to be measuring a different construct. Another high relationship did appear between ways of coping and social support that is, .60. Here we may talk of a good relationship although the idea of items similarities in both construct cannot be totally excluded. On the contrary, ways of coping and multicultural attitude yield very low correlation but significant values. With this, one may start to think of some hidden variables that are exerting an effect between these two psychological construct. It therefore implies that they maybe a need to identify these hidden variables. The same goes for the relationship that exists between social support and multicultural attitude. It can therefore be concluded that although the relationship between these psychological constructs has been established, there is some tendency of poor discriminate functioning between some of the constructs.

The fit of the model

Despite the good relationship that has been shown between the psychological constructs, the model in question fail to fit well to the data base on the fit indices that were taken into consideration. That is CFI=.94, RMSEA=.08 and SRMR=.05. Although the CFI and SRMR fall within the recommended range, the RMSEA was above the range we used (<.05). The question that may arise from here is that, why a model with a good relationship among the psychological measures will fail to fit to the data? The first thought maybe that, there have been some misspecifications. When one take a look at the

modification indices, there exist indeed some proposition. For instant it shows that our model fitness can be improved by removing the path with multicultural attitude. But in this case, we are caught short from doing such modifications since there were no theoretical bases for doing so. In this situation, there is a need for search of literature that will allow us to do so. Although we did perform factorial analysis of all measures, they maybe a need to perform an Exploratory Factor analysis (EFA) such as to identify problematic items. It may therefore means that we did Jump too fast into CFA. Another question may arise, with a bad fit CFA model why proceed to a Structural Regression Model (SRM). In this case, it helps us to generate a reflection that may pave way for a better model in future.

Structural Regression of Psychological dimensions variable (SRM)

Indeed there exists a positive causal relationship between the psychological variables in the model. Firstly the variables loaded significantly to each other as we have presumed. Never the less, high regression value of .71 was obtained for ways of coping and self-efficacy. That is, the value at which ways of coping will predict self-efficacy. This high value may question the discriminate functionality of the two psychological measures. This is in line with the fact that, there exist similarities between items of the two construct although the two measures are destined to be measuring two different psychological dimensions. Social support predicted ways of coping normally at .58 regression value. It therefore implies that providing social support is beneficial for the ways of coping. It also turn out that multicultural attitude is predicting ways of coping with a low but significant regression value (.28). This low significant value maybe problematic as there maybe signs of some hidden variables that are exerting the indicated causal behavior. The same goes for multicultural attitude and social support. Despite all these positive causal relationship between the psychological variables, the model did not fit to the data.

The fit of the model

With all these positive causal relationship that exist between the psychological variables, the model failed to fit well to the data. This is base on the fit indices that were taken into consideration, for instant the RMSEA was .08 which is above .05 that we put in place as a cut off point. This value is very important as it indicate approximately the level of

errors in the models. In this situation, one may ask why a model with good estimator values did not fit to the data. It maybe that there were some misspecifications in the model, for instant, there are some indications from the modification indices showing that if we eliminate the multicultural attitude our model maybe improved. Unfortunately in this situation, the literature used did not allow us to do so. It can also be simply that the model has not fit to the data or simply a call for further study that will identify problematic items. For instant exploratory factor analysis maybe a starting point during this identification process (EFA). However we did carry out some factorial analysis that helps in loading items to their respective psychological measure dimensions.

Correlation of latent psychological variables in the model with MSPSS, MASQUE and CSES

In this model, there exists a relationship between the psychological variables tested. This relationship was high between social support and self-efficacy (.56). As we proceed to multicultural attitude and social support the relationship turns out to be weaker though significant. This low but significant relationship may signify a problem in the model. For instance, the fact that some hidden variables are indeed exerting this relationship cannot be role out. The relationship even goes down smaller between multicultural attitude and self-efficacy but still yet significant. The same reason of the present of hidden variables may also hold in this case.

The fit of the model

Even though the relationship among social support, self-efficacy and multicultural attitude was positive, the model failed to fit to the data. With and RMSEA of .14 which is far beyond the range of .05, this lead us to conclude that the model did not fit to the data. Although CF1 and SRMR were better, they cannot be judge alone for model fit. One possible reason for this misfit maybe that there has occurred some misspecification in the model. For instant a look at the model fit modification indices shows that if the path between multicultural attitude and self-efficacy is eliminated, our model will improve. In this circumstance, our literature proceedings do not allow us to proceed with this re-specification approach. There could also be a signal of problematic items in the model.

Although we did factorial analysis, there could have been a need for Exploratory Factor Analysis (EFA). With this, we maybe able to identified the problematic items.

Structural regression of psychological variables in the model with MSPSS, MASQUE and CSES

As indicated by the model, the loading of self-efficacy on social support was high and significant (.68). This high regression value confirms the causal relationship that exists between the two psychological measures. The causal relationship between social support and multicultural attitude was weak but still significant. This weak regression value may call for attention at the level of specification or simply the present of foreign invisible variables associated in this specify path. Equally, self-efficacy predicted social support at a weak but significant value calling our attention to misspecification issue and present of foreign variables. For instant a look at the modification indices shows that, if the path between social support and self-efficacy are eliminated, we can improve the model through the reduction of chi-square. In this situation, base on our theory. We are unable to carry out these modifications.

The fit of the model

Although with enough predicting effect in our model, the model fails to fit to the data. For example with a RMSEA value of .14 one is obliges to accept the badness of fit of this present model base on the data used. Although other values such as CFI were good, one cannot stick only to them in evaluating the fit of the model. One thing in this model maybe certain, that is misspecification. For instant the modification indices inform us that, if we eliminate the path between self-efficacy and multicultural attitude, we have greater chances of improving the fit of the model. But at the same time, lack of proper literature did not permit us to do so. Another certain point maybe that of misbehavior of certain items in the measure. This is so because at times just factorial analysis may not be enough to identified problematic items for which in this case Exploratory Factor Analysis (EFA) may have been a good starting point.

Correlation of latent psychological variables in the model with MSPSS, WCQ and WHOQOL-Bref

The relationship that exists between the psychological variables in this model is evident. With this relationship, higher values were obtained between quality of life and social support (.44) and at the same time between social support and ways of coping (.55). The weak but significant relationship was obtained between ways of coping and quality of life. This weak but significant relationship maybe signaling a problem in the model. In this case, there maybe some suspicious of a hidden variable exerting its effect in this relationship. The issue of misspecification cannot also be rule out. For instants if we removed the path between ways of coping and quality of life, the model can improve to a certain degree. However, our literature background limits us from doing so.

The fit of the model

Although we did establish a good relationship between the psychological variables, some of the fit indices were poor. For instant, with an RMSEA of .10 we are far away from a good fit in this model. A solution maybe obtained through re-specification which of course should be theory driven as well. For instant eliminating the path between quality of life and ways of coping could improved the model to a certain degree. When one looks at the modification indices, there are some suggestions showing that the fit of the model maybe improved by eliminating the path between quality of life and ways of coping. In this case, our theory did not allow us to perform this modification.

Structural regression of psychological variables in the model with MSPSS, WCQ and WHOQOL-Bref

A look at the beta values in this model reveal a good causal relationship especially between ways of coping and social support followed by quality of life and social support. For instant the good value of .59 for social support predicting quality of life indicate a well established causal direction. Implying that there maybe an improvement in ways of coping when social support is present. Furthermore this causal relationship was evident in quality of life path. That is, the present of social support may lead to a better quality of life. Furthermore, a moderate causal relationship was established between ways of coping

and quality life. Although this was significant at a low value, it maybe problematic that certain inexplicit variables are exerting an effect on this path.

The fit of the model

Despite a good causal relationship between the tested psychological variables, the model fails to fit to the data. Base on our fit indices considered, only CFI (.93) and SRMR (.04) appear to be at the accepted range. But unfortunately with an RMSEA value of .10 which is above the set range, one cannot talk of a good fit. With a poor fit produced, one may start looking at the modification indices. Or one may have started from exploratory factor analysis such as to indentify the problematic items.

Correlation of latent psychological variables in the model with MSPSS, MASQUE, WCQ, CSES and WHOQOL-Bref.

In this complete model, we have witness a decline in some relationship among psychological measures. The most striking relationship is that of multicultural attitude with other psychological variables. For instance multicultural insignificantly attitude correlates with coping at .15. This is followed by multicultural attitude with social support and coping self-efficacy. In this model, multicultural attitude has appeared to be problematic given a decline in its relationship with other psychological measures. We have witness some declined in other measures, but this declined still remain significant. In this situation, we may suggest that the addition of another parameter with just a normal sample size may have contributed to this declined.

The fit of the model

In this model, nearly all the fit indices chosen were bad. For instant, our CFI stood at .80 while RMSEA at .33. Only the SRMR value (.07) was better. The addition of another parameter to the model may have help in drawing down the fit values. Never the less, the modification indices did provide some suggestion. For instant eliminating the multicultural attitude path may improved the model fit. This may also be link to poor behavior of some items, an aspect which could have been handled out with exploratory factor analysis. Although we perform factorial analysis, poor behavior of some items may

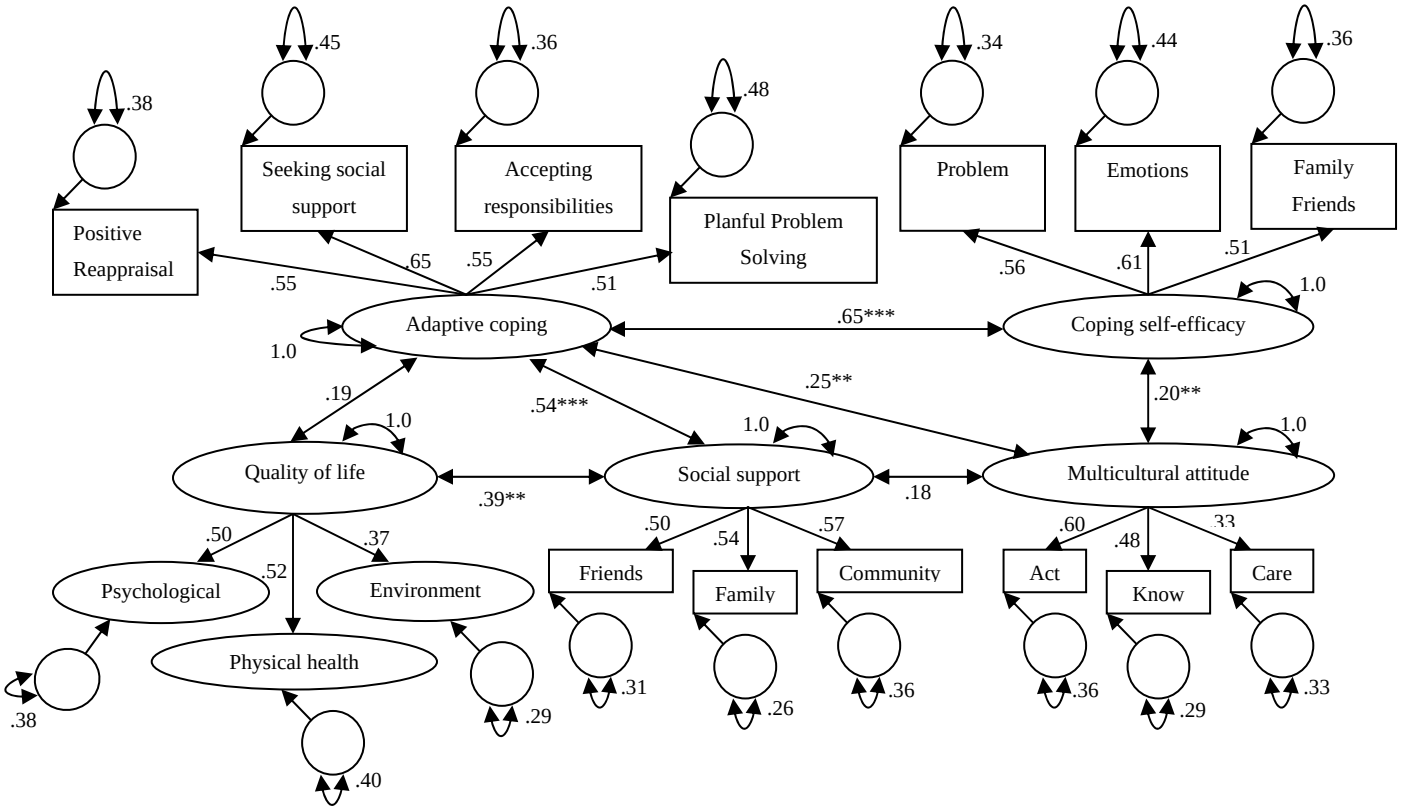
not be excluded especially given the fact that the instruments were translated from English to French.

Structural regression of psychological variables in the model with MSPSS, MASQUE, WCQ, CSES and WHOQOL-Bref.

As can be seen from the figures below, a positive causal relationship is been maintained among the psychological variables tested. However, this relationship has decline and have failed to be significant between some measures. For example the path between multicultural attitude and ways of coping has failed to be significant. This fall in predictive power maybe link to parameter addition and small sample size.

The fit of the model

All the important fit indices chosen for this model were bad. For example, the CFI was .80 while RMSEA was .33. The only fit indices that fall within the range was SRMR. These weak indices maybe link to the addition of another parameter to the model. However, the modification indices did provide some suggestion. For instant eliminating the multicultural attitude path may improve the model fit through the reduction of chi-square. There may have also been the issue of item not measuring what they were destined to. In this situation, exploratory factor analysis may have been the starting point for this model construction. Although factorial analysis was carried out, poor behavior of some items may not be excluded especially given the fact that the language and cultural background may have influence the way individuals endorsed each item.



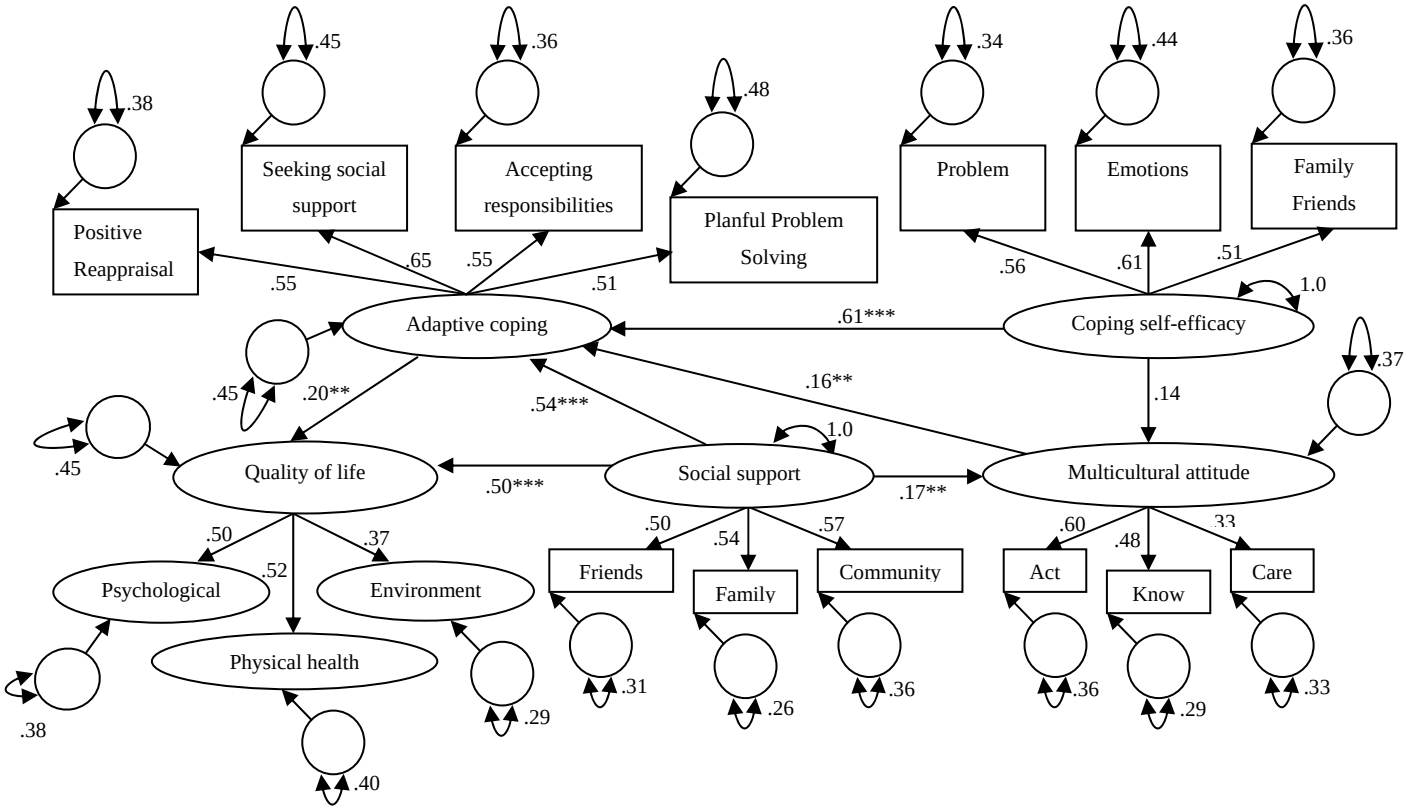
**p < .01 ***p < .001

Figure 1. Confirmatory factor analysis (CFA) for the overall model at (*N* = 221)

Table 1

Overall model fit indices

Model fit indices	Results	Recommended Values(Kline, 1998)
CFI	.80	≥ .90
RMSEA	.33	< .05
SRMR	.07	< .08



**p < .01 ***p < .001

Figure 2. Latent structural regression (SR) overall model evaluated at (*N* = 221)

Table 2

Overall model fit indices

Model fit indices	Results	Recommended values (Kline, 1998)
CFI	.80	≥ .90
RMSEA	.33	< .05
SRMR	.07	< .08

General conclusion on all the models tested

Taking a look at the specify paths in our models, we may say that our hypothesis of prediction were partially investigated. This is so because the estimated paths were positive and significant. How ever, given that all the models tested did not fit to the data, we can say that the fit hypothesis was not true. Although with the bad fit, the models have laid a foundation for subsequent research that will came out with a more suitable model that will behave well base on the fit indices. In light of this, we can say that chapter 5, 6 and 7 of this thesis was a reflection on the construction of a better model in the future.

Subsequent approached aim at obtaining a model with good fit

A follow up approached will be to carry out exploratory factor analysis such as to identify problematic items. This maybe followed by a search for additional literature that will allow for the modification of the models. The last scenario will be to independently collect another data with a large sample size. In Summary, the following steps are needed to come out with a model that will fit to the data.

1. Carry out Exploratory Factor Analysis (EFA)
2. Search for existing literature that will allow for re-specification in the model
3. With the above approaches failing to establish a model that fit to the data, there will be a need for independent data collection with a large sample size.

Assessing Stress, Coping and Quality of Life among Refugees and Asylum Seekers in Luxembourg

Abstract

In this dissertation we assessed psychological stress through post-traumatic embitterment disorder, quality of life among refugees and asylum seekers in Luxembourg. At $N = 33$, semi structured interviews indicated that asylum seeking administrative processes install fear of repatriation while social isolation, loneliness, lack of friends and of communication with families was linked to social, financial and acculturation difficulties. At $N = 102$, there were good indications that asylum seekers are victims of post-traumatic embitterment disorder. Additionally, 221 asylum seekers responded to ways of coping, social support, multicultural attitude, self-efficacy and quality of life questionnaires. With the help of structural equation modeling, social support, multicultural attitude and self-efficacy significantly predicted adaptive ways of coping with psychological stress. At the same time, there was the mediating and predictive effect of adaptive ways of coping and social support on quality of life respectively. Part of the models did not fit well to the data. Based on our findings, tracks for a multidisciplinary care model for refugees and asylum seekers were identified.

Key words: Social support, Post-traumatic embitterment disorders, multicultural attitude, coping strategies, quality of life, self-efficacy, refugees and asylum seekers

Évaluation du Stress, des Stratégies d'Ajustement et de la Qualité de Vie chez des Réfugiés et des Demandeurs d'Asile au Luxembourg

Résumé

Dans cette thèse, nous avons évalué le stress psychologique, à travers les troubles d'amertumes et post-traumatiques, les stratégies d'ajustement, ainsi que la qualité de vie des réfugiés et des demandeurs d'asile au Luxembourg. Dans un premier temps, 33 entretiens semi structurés ont été menés et ont montré que les processus administratifs installent la peur d'un rapatriement, alors que l'isolement social, la solitude, le manque d'amis et de communication avec les familles sont associés à des difficultés sociales, financières et d'acculturation. Dans un deuxième temps, 102 demandeurs d'asile ont complété un questionnaire de trouble amertume post-traumatique et révélé des scores très élevés. Dans un troisième temps, 221 demandeurs d'asile ont complété les questionnaires suivants : soutien social, attitudes multiculturelles, stratégies d'ajustement au stress, qualité de vie et auto-efficacité. Avec l'aide d'un modèle d'équation structurelle, le soutien social, l'auto-efficacité, l'attitude multiculturelle ont prédit de manière significative les stratégies d'ajustement au stress psychologique. L'effet médiateur des stratégies d'ajustement et prédictif du soutien social sur la qualité de vie ont été établis. Une partie des modèles n'étaient pas bien ajustés aux données. Grâces aux résultats obtenus nous avons pu dégager quelques pistes pour la prise en charge multidisciplinaire des réfugiés et des demandeurs d'asile.

Mots clé: Soutien social, trouble amertume post-traumatique, attitude multiculturelle, stratégies d'ajustement au stress, qualité de vie, auto-efficacité, refugiés et demandeurs d'asile