AMERICAN UNIVERSITY OF BEIRUT

PREDICTORS OF POSTTRAUMATIC STRESS SYMPTOMS IN SYRIAN REFUGEES

by
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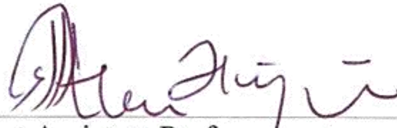

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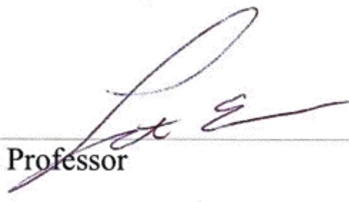

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AN ABSTRACT OF THE THESIS OF

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The 2011 Syrian war has created the largest refugee crisis of our time, with Lebanon hosting over one million refugees. Refugees are at high risk of exposure to multiple traumas, which contributes to an elevated vulnerability to developing symptoms of posttraumatic stress disorder (PTSD). Yet, there is a lack of empirical research investigating PTSD symptoms and their predictors in Syrian refugees in general and in Lebanon in particular. We surveyed 158 Syrian refugee adults in 2 informal tented settlements in the Bekaa region of Lebanon. Approximately 17% of our sample endorsed high PTSD symptoms. Hierarchical regression analysis controlling for trauma exposure and gender identified perceived injustice, trauma-related shame, and sense of coherence as significant predictors of current PTSD symptoms. The findings highlight the importance of considering both socio-interpersonal and intrapersonal factors when assessing PTSD symptoms among Syrian refugees. Limitations and field considerations are also discussed.

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CHAPTER I

INTRODUCTION

According to the 1951 Refugee Convention in Geneva, a refugee is someone who, “owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality, and is unable or owing to such fear, is unwilling to avail himself of the protection of that country […]” (United Nations, 1954).

A. Context

As of 2016, the United Nations High Commissioner for Refugees (UNHCR) reported that approximately 34 thousand people are forced to flee their homes because of conflict or persecution every day. There are more than 65 million forcibly displaced people around the world, and of these, over 21 million are registered refugees (United Nations High Commissioner for Refugees, 2016a).

Of the 21 million refugees, more than 4.9 million are of Syrian origin (UNHCR, 2017). In January 2011, inspired by similar events in the region, protests erupted in Syria against the ruling regime. In March 2011, protestors were violently repressed by the state, sparking the ongoing conflict, which has since grown in complexity (Security Council Report, 2016). The majority of the Syrian refugees have sought refuge in neighboring countries including Turkey, Lebanon, Jordan, Iraq, and Egypt (UNHCR, 2016b). In Lebanon, the influx of Syrian refugees began in April 2011 with approximately 5,000 Syrians crossing the borders (Syrian Refugees, 2016). Today, Lebanon hosts more than 1 million registered refugees, making it the top hosting country per capita in the world (UNHCR, 2016b; UNHCR, 2015). Moreover, the UN

estimates that over 70,000 unregistered children have been born in Lebanon since 2011, and this number excludes unregistered refugee families that the UNHCR does not have an estimate for (Davison, 2016).

B. Understanding Refugee Trauma

Papadopoulos (2007) states that when an individual becomes a refugee, the situation is "not a psychological phenomenon per se…[but] a socio-political legal phenomenon, with psychological implications" (p. 1). This is embodied in the unique challenges that a refugee faces.

It is useful to understand these challenges with respect to the distinct phases of the refugee experience. Derjalais (1996) provides a model describing the stressors of each stage of the refugee's dislocation journey, starting with the *pre-flight period*, which refers to the time leading up to the decision to flee. In this stage, refugees are likely to witness and experience political persecution, violence, sexual assault, family loss, social upheaval, food shortages, poor economic conditions, and environmental scarcities. The second stage, *flight*, is marked by separation from family and community, collapse of social support networks, and increased exposure to violence and sexual assault during migration. The *reception* stage includes threat of forced return to home country, inhospitable living conditions, food scarcity, inadequate health conditions, and unemployment. Finally, the stressors associated with the *resettlement* stage include unemployment, social isolation, adjustment difficulties, acculturation problems, language barriers, prejudice, and marginalization. Moreover, if the hosting country is not accepting of incoming refugees, it is sometimes the case that refugees spend months, even years, in unsanitary, overcrowded, and underserved refugee camps where access to basic needs such as running water and consistent meals are daily

struggles (Kiernan, 2007; National Forum of Services for Survivors of Torture and Trauma, 2001).

1. Challenges Facing Syrian Refugees in Lebanon

Syrian refugees in Lebanon face additional challenges related to the Lebanese government, local municipalities, and host communities (Harb & Saab, 2014). As the refugee crisis in Lebanon continues to grow, the Lebanese government recently took measures to limit refugee access to Lebanon, justifying this step as necessary to preserve peace and stability in Lebanon (UNHCR, 2015). For example, in May 2015, the government instructed the UNHCR in Lebanon to suspend registration of Syrian refugees (UNHCR, 2017). Suspension of UNHCR registration means limiting the access of unregistered refugees to UNHCR assistance in services including healthcare, education, food and non-food items, protection, and legal counseling (Alabaster, 2016; Gallart, 2015).

The Lebanese government also introduced a law in 2015 requiring all Syrian refugees to pay 200 USD for a six-month or annual residency permit and to provide proof of sponsorship by an individual or company. The conditions for obtaining a sponsorship are difficult and complicated, and the 200 USD is a crippling expense for refugees in Lebanon, 70% of whom are living in extreme poverty (Alabaster, 2016; Human Rights Watch, 2016). The Human Rights Watch (HRW) has since urged the Lebanese government to forgo this new law (HRW, 2016). As per the Lebanese national law, refugees staying in Lebanon without an entry permit or stay documentation are considered illegal, and hence have limited legal status (Norwegian Refugee Council, 2014). In a study by the Norwegian Refugee Council (2014), the key challenges reported by refugees with limited legal status included: restrictions on freedom of

movement in fear of arrest and detention; not approaching police or the justice system to report crimes in fear of arrest and detention; challenges accessing assistance and services including healthcare, education, and food and non-food items; and increased exposure to abuse and exploitation by landlords and employers.

Moreover, in the past three years, at least 45 municipalities around Lebanon have enforced curfew hours for Syrians with threats of arrest in case of violations (HRW, 2014; Reuters, 2016; The Daily Star, 2016). Finally, a number of representatives from Lebanese political parties, including the Lebanese president, have made discriminatory remarks towards Syrian refugees and have verbalized plans to deport them back to Syria (Cambanis, 2016; Harb, 2016).

CHAPTER II

LITERATURE REVIEW

Thus, refugees are a particularly vulnerable population due to the cumulative nature of the stressors they endure, which put them at high risk for physical health problems including disability, malnutrition, chronic illness, and mental health problems including depression, trauma, anxiety, learned helplessness, fear, loss, and suicide (Derjalais, 1996; Gerritsen et al., 2006; Wong et al., 2011).

A. Somatic and Psychological Adversities in Refugees

Refugees typically experience a range of health difficulties. They have lower life expectancy and higher morbidity, as compared with the general population (Eitinger, 1964; Schnurr, 1996). Refugees also typically give low ratings of their health status on self-report measures. Wong et al. (2011) explored the health status of Cambodian refugees in the United States two decades after their resettlement and found that an astounding 90% of the refugees endorsed poor or fair health status compared to only 19% of the general adult population in California. Although the refugee sample was older and poorer than the general population, they still fared worse on health status even after matching refugees with the local population on demographic risk factors such as age, income, and gender. Wong et al. thus suggested that the disparity may be attributed to other characteristics specific to Cambodian refugees.

In a study that explored physical health of Afghan, Iranian, and Somali refugees residing in the Netherlands, 42% of the participants also reported a poor general health status, and almost 46% reported having more than one chronic condition (Gerritsen et al., 2006). The most common of which were dental problems, eye

problems, severe neck/shoulder problems, back complaints, and migraines. Similar results were found in a recent study that investigated physical health status of Iraqi refugees in the United States found that 60% of participants reported at least one chronic condition, and 37% reported two or more conditions (Taylor et al., 2014).

In addition to the somatic complaints, refugees have high rates of psychological difficulties. There is no single refugee experience, and thus there is wide variability in the symptomatology reported by refugees (Hollifield, 2012; Mollica et al., 1993). Most often, refugee populations report symptoms of anxiety, depression, and posttraumatic stress (Hollifield, Warner, Krakow, Jenkins, & Westermeyer, 2009; Taylor et al., 2014; Gerritson et al., 2006). However, of controversy are the wide ranges in prevalence rate estimates of psychological symptomatology and disorders reported in the literature. Prevalence rates of anxiety symptoms range from 2% to 80% (Gerritson et al., 2006). Rates range from 0 to 99% for posttraumatic stress disorder and 3 to 80% for depression (Carlson & Rosser-Hogan, 1991; de Jong, Mulhern, Ford, van der Kam, & Kleber, 2000; Hashemian et al., 2006; Steel et al., 2005).

There are several factors that have been proposed to explain this large variation including sampling and methodological issues. First, refugees are a heterogeneous population whose mental health needs may differ based on country of origin, prolonged exposure to conflict, and ongoing conflict in the country of origin (Slewa-Younan, Guajardo, Heriseanu, & Hasan., 2015; Steel et al., 2009). Moreover, the diversity in assessment instruments used in data collection and their cultural sensitivity also yields a variation in the results across studies (Hollifield et al., 2002).

In the largest meta-analysis to date, Steel et al. (2009) examined 161 articles on refugees and conflict affected populations, and the total subject pool included more than 82,000 subjects from 40 countries. The weighted prevalence rates across the studies

were 30.6 and 30.8% for PTSD and depression, respectively. In a recent meta-analysis that explored prevalence rates among Iraqi refugees located in Western countries specifically, prevalence rates also ranged from 8 to 37.2% for PTSD and 28.3 to 75% for depression (Slewa-Younan et al., 2015). Therefore, in accurately understanding the suffering of refugees and developing appropriate intervention plans, it is helpful that we look at more specific groups within the refugee population.

1. Syrian Refugees

There are only a handful of studies that explore mental health issues with Syrian refugees, and even fewer studies specifically looking at Syrian refugees residing in Lebanon. A recent report commissioned by the UNHCR reviewed the literature on mental health and psychosocial wellbeing of Syrians and revealed that the most prevalent and clinically significant problems among Syrians are symptoms of emotional distress related to depression, prolonged grief disorder, posttraumatic stress disorder, and various forms of anxiety disorders (Hassan, Ventevogel, Jefee-Bahloul, Barkil-Oteo, & Kirmayer, 2016).

There is limited research on Syrians with substance use and severe mental disorders such as psychosis. In a study with Syrian refugees in Iraq, more than half of the participants reported having more than five alcoholic drinks per week (Berns, 2014). Kazour et al. (2017) found a low lifetime prevalence rate of 1.99% and a point prevalence of 0.66% of substance use disorder among Syrian refugees residing in the Central Bekaa in Lebanon. In data provided by the International Medical Corps (IMC), approximately 11% of Syrians treated in IMC centers in Lebanon and the region were diagnosed with psychotic disorders (Hijazi & Weissbecker, 2015).

Acarturk et al. (2015) conducted a randomized controlled trial of eye movement desensitization and reprocessing (EMDR) treatment with Syrian refugees with PTSD symptoms. Of the 688 respondents living in a refugee camp located at the border between Turkey and Syria, 83.5%, scored above the predetermined cutoff for probable PTSD.

In another study with 73 Syrian refugees in Zaatari camp, one of the largest refugee camps housing more than 80,000 Syrian refugees, 56% of respondents reported experiencing psychological distress symptoms including hopelessness about the future, anxiety, difficulty sleeping, anger, and fearfulness (Basheti, Qunaibi, & Malas, 2015). Moreover, 37% of the participants reported having suffered from all of the mentioned symptoms (Basheti et al., 2015).

Alpak et al. (2015) assessed 304 Syrian refugees in tent cities in Gazientep, Turkey using structured interviews and the DSM-IV-TR. They found the prevalence of PTSD to be 33.5%, with women four times as likely to have PTSD than men. People exposed to more than one traumatic event or having psychiatric family history were also at higher risk of developing PTSD (Alpak et al., 2015).

Another study investigated PTSD among 354 Syrian refugees in Turkey using the HAD Stress screening tool, which was developed with Ethiopian and Somali refugees as a quick assessment for PTSD in emergency situations (Jefee-Bahloul, Moustafa, Shebl, & Barkil-Oteo, 2014). Jefee-Bahloul et al. (2014) found that 41.8% of participants had scores on HADStress, a psychological distress screening tool validated with Ethiopian and Somali refugees, that correlate with PTSD. Furthermore, 62% suffered from sleep difficulties, 47% reported dizziness, 54.4% reported headaches, and 44% reported changes in appetite (Jefee-Bahloul et al., 2014).

A study by Naja, Aoun, El Khoury, Bou Abdallah, and Haddad (2016) aimed to assess the prevalence of depression among Syrian refugees in Lebanon using the Arabic version of the structured Mini International Neuropsychiatric Interview, which is based on DSM-IV diagnoses. Among 310 Syrian refugees, Naja et al. found the prevalence of depression to be at 43.9%. Interestingly, gender did not have a significant influence on depression, and levels of religiosity did not correlate with depression (Naja et al., 2016).

In a recent study conducted by Kazour et al. (2017), the prevalence of PTSD in a sample of 452 adult Syrian refugees residing in camps in Central Bekaa in Lebanon was assessed also using the Mini International Neuropsychiatric Interview. Kazour et al. found PTSD lifetime prevalence rates of 35.4% and current prevalence of 27.2%. Among their proposed predictors, including age, sex, marital status, education level, employment status, duration of displacement, and Syrian region of origin, only region of origin was identified as a significant predictor of lifetime PTSD, with significantly more refugees coming from Aleppo having PTSD than refugees coming from Homs (Kazour et al., 2017).

B. Trauma and Posttraumatic Stress Disorder

The number and nature of the traumas endured by refugees puts them at risk of developing posttraumatic stress disorder. There is a well-established body of research showing that exposure to political violence—which most, if not all refugees, experience—results in an increased risk of acute and chronic PTSD (e.g., Carlsson, Mortensen, & Kastrup, 2006; Fazel, Wheeler, & Danesh, 2005; Kinzie, 2007; Mollica, 2006; Wilson, 2007; Wilson & Drožňek, 2004). Refugee trauma has been examined primarily through the PTSD lens. This is based on the bulk of evidence suggesting that

most refugees have complex clusters of symptoms including anxiety, depression, irritability, excessive worry, forgetfulness, exhaustion, headaches, somatoform disorders, heart palpitations, flashbacks, dissociation, difficulty sleeping, and avoidance of stimuli, all of which fall into the PTSD category (Carlsson, et al., 2006; Kinzie, 2007; Mollica, 2006; Wilson, 2007; Wilson & Drožňek, 2004).

The *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* (*DSM-5*; American Psychiatric Association [APA], 2013) defines a traumatic event as being directly or indirectly exposed to actual or threatened death, serious injury, or sexual violence. Exposure to trauma is a significant risk factor for the development of various psychological disorders, most notably PTSD (Gragkaki, Thomaes, & Sijbrandij, 2016; Ganzel, Casey, Glover, Voss, & Temple, 2007).

According to the *DSM-5*, PTSD is characterized by 20 symptoms which fit into four categories: *re-experiencing*, *avoidance, negative cognitions/mood,* and *arousal* (APA, 2013). *Re-experiencing* symptoms, or intrusion symptoms, include: recurrent and distressing memories of the trauma, persistent and distressing dreams related to the trauma, dissociative reactions including flashbacks, and intense psychological distress or physiological reactions to internal or external cues that resemble the trauma. The second cluster of symptoms related to *avoidance* of stimuli associated with the trauma include: effortful avoidance of internal cues related to the trauma, including memories, thoughts, or feelings, and effortful avoidance of external cues, including people, places, or activities, that are related to the trauma. Avoidance of internal and external cues associated with the trauma reflect strategies the individual uses to avoid reminders of the trauma. Symptoms relating to alterations in *negative cognitions and mood* include: difficulty remembering aspects of the trauma, typically due to dissociative amnesia; an exaggerated negative view of the self, others, and the world as a result of the trauma; a

distorted blame of self or others related to the cause of the traumatic event; persistent and strong negative emotions including fear, horror, anger, guilt, or shame, or an inability to experience positive emotions; diminished interest or participation in activities; and feelings of detachment from others. Finally, symptoms related to physiological *arousal* or reactivity include: problems with concentration, sleep difficulties, exaggerated startle response, and hypervigilance, in addition to aggressive or irritable behavior towards others, and reckless or destructive behavior towards the self.

1. Beyond the DSM's PTSD

There are several points of controversy regarding the application of the specific identified criteria of PTSD to refugee trauma that are worth noting.

When individuals endure prolonged and repeated trauma, they are at risk of developing complex trauma (Herman, 1992a, 1992b). Herman coined the term *complex trauma* to distinguish between the syndrome of "simple" PTSD, which is based on prototypes of circumscribed traumas (e.g., rape, disaster, motor accident), and the syndrome of complex posttraumatic stress disorder (C-PTSD) resulting from prolonged, repeated trauma (e.g., childhood physical or sexual abuse, domestic abuse, war prisoners, hostages). According to Herman (1992b), C-PTSD is distinct from simple PTSD in that it goes beyond the typical PTSD symptomatology to include profound changes in identity and relationships.

Currently, C-PTSD is yet to be included as a diagnosis in the *DSM*. The diagnosis *disorder of extreme stress, not otherwise specified* (DESNOS) found in the *DSM-IV-TR* (APA, 2000) was instead used to conceptualize individuals with histories of complex traumas. The diagnostic criteria for DESNOS in the *DSM-IV-TR* (APA,

2000) included alterations in six areas of functioning: a) regulation of affect and impulses, b) attention or consciousness, c) self-perception, d) relations with others, e) somatization, and f) systems of meaning. Although a traumatic experience was not a requisite for a diagnosis of DESNOS, individuals in both clinical and research settings had experienced prolonged traumas similar to those described by Herman (1992) in her definition of complex trauma. The expanded criteria for PTSD in the current version of the *DSM* were meant to encompass the C-PTSD syndrome; however, researchers still find it lacking.

2. Cumulative Trauma

Moreover, Kira et al. (2006) noted that refugees not only endure *repeated* traumas, as addressed in the complex trauma model, but are unique in that they experience *different types* of trauma. Thus, Kira et al. propose a cumulative model of PTSD that accounts for the type, number, severity, and longevity of traumas to accurately conceptualize treatment when working with refugees and other populations that experience different types of trauma (e.g., victims of domestic abuse).

Although a diagnosis of PTSD in the *DSM-5*, and in all previous versions of the *DSM*, has been based on an individual's response to a single trauma, research has shown that PTSD is more likely to occur if the individual has experienced multiple traumas in their history (e.g., Breslau, Chilcoat, Kessler, & Davis, 1999; Kilpatrick et al., 2013; Yehuda et al., 1995). In a major multinational study by Karam et al., 2014, approximately 20% of people with PTSD attributed their disorder to the effects of more than one trauma.

Thus, cumulative trauma, in which an individual experiences multiple trauma events across their lifespan (Follette, Polusny, Bechtle, & Naugle, 1996), puts an

individual at higher risk of developing PTSD, and has been shown to predict higher severity of PTSD symptoms (e.g., Briere, Agee, & Dietrich, 2016; Finklestein & Solomon, 2009; Yehuda et al., 1995).

At the moment, refugee trauma is mainly understood through the lens of PTSD as it is currently defined by the APA in the *DSM-5*. It is considered to be universally experienced in that the cluster of symptoms reported by refugees often fit into the PTSD category, including avoidance of stimuli, flashbacks, dissociation, somatoform disorders, headaches, exhaustion, forgetfulness, excessive worry, difficulty sleeping, anxiety, and depression, all of which are symptoms that co-occur with PTSD (Carlsson et al., 2006; Kinzie, 2007; Mollica, 2006; Wilson, 2007; Wilson & Drožñek, 2004). Thus, the *DSM-5*'s model of PTSD is often used to understand refugee trauma, despite the controversy over its cross-cultural validity and its capacity to accurately represent the refugee experience, often characterized by numerous and ongoing traumatic events.

3. Socio-Interpersonal Perspective of PTSD

The psychological (Brewin, 2001; Ehlers & Clark, 2000; Foa & Kozak, 1986) and the psychobiological models (Heim & Nemeroff, 2009, Yehuda, 2006) of posttraumatic stress disorder have long dominated PTSD research and have contributed fundamentally to our understanding of the disorder and the subsequent development of interventions. These models focus on the intrapersonal and interpersonal processes that an individual experiences (e.g., changes in cognition, behavior, and emotion about self, others, and the world) and their impact on the etiology and maintenance of PTSD. Despite the extensive contribution of these models to our understanding of PTSD, they implicitly do not acknowledge that the individual is embedded within a larger social fabric of relationships and structures, including family, the community, and society at

large, and that there is a constant interplay between those structures, which impacts the individual (Brewin, Andrews, & Valentine, 2000; Bronfenbrenner, 1979; Maercker & Horn, 2013; Maercker & Hecker, 2016; Ozer, Best, Lipsey, & Weiss, 2003).

Maercker and Horn (2013) proposed a socio-interpersonal framework to explain the etiology and maintenance of PTSD that expands on the traditional individual-centered theories of PTSD and integrates social, contextual, and interactive processes between the individual and their environment. Their model, which Maercker and Hecker (2016) later elaborate on, breaks down the interpersonal and intrapersonal processes of the traumatized individual into three layers: social affects, close relationships, and culture and society.

The first level, *social affects*, comprises the interactive styles and behavioral tendencies of the individual. This layer of the model consists of the social-affective symptoms of the *DSM-5* diagnosis of PTSD, such as feelings of guilt, shame, and anger, in addition to guilt-related and shame-related cognitions. The second level is the level of *close relationships*, and the individual's perception of the degree of psychological intimacy with others in their life. With adults, these close relationships are typically with romantic partners, family members, or friends. Social support and secure attachment have consistently been found to predict better post traumatic outcomes (Charuvastra & Cloitre, 2008; Cloitre, Cohen, & Karestan, 2006) particularly when the victim is able to intimately disclose their trauma (Pennebaker & Harber, 1993; Rimé, 2009). The third level represents the cultural and societal spheres and their influences on the individual's processing of the trauma. This level represents belonging to a certain culture, religion, or society with a certain justice or health system based on shared cultural values (Maercker & Horn, 2013). In contrast to the second level where interactions happen among acquainted individuals, the interactions at the third level are

between the trauma victim and the group they belong to, such as a certain culture, religion, or society. Collective traumas in particular, such as natural disasters or wars, often have less of a psychological toll on the individual because the burden of the trauma is carried by all the members of the group and not a single individual and is thus generally processed more easily than individually experienced trauma (Bonanno, Galea, Bucciarelli, & Vlahov, 2006; Kaniasty & Norris, 2008; Kessler, Chiu, Demler, & Walters, 2005; Maercker, Forstmeier, Wagner, Glaesmer, & Brähler, 2008). If all members of the group experienced the same trauma, it is less likely that an individual suffers from stigmatization or from being ostracized compared to those who are individually traumatized, as is the case with victims of rape or torture (Maercker & Horn, 2013). Even for those who have experienced individual trauma, acknowledgment of the suffering from society is perceived as more supportive and less stigmatizing (Maercker & Horn, 2013).

In summary, this socio-interpersonal model proposed by Maercker and Horn (2013) and Maercker and Hecker (2016), integrates previously established models of PTSD and suggests a contextual view of trauma (Bronfenbrenner, 1979), in which the traumatized individual is seen as nested in a larger social structure that impacts the severity of PTSD. For example, the experience of shame following rape might vary and impact PTSD symptoms differently, if the victim is in a romantic relationship that allows disclosure of shame-related content. Moreover, both the level of shame and the disclosure in the couple are influenced by how the society in which the couple belongs views sexual assault.

A contextual view of trauma is particularly relevant when working with refugees, a group that collectively experiences the trauma of displacement and separation from homeland, communities, and families, and that is comprised of

individuals who have possibly experienced rape, torture, political imprisonment, or combat traumas. In the framework that the socio-interpersonal model of PTSD suggests (Maercker & Hecker, 2016; Maercker & Horn, 2013), the level of shame experienced by refugees, which would comprise the social-affect level of the model, might have a different impact on the extent of their PTSD symptomatology, depending on whether they perceive their trauma as unacknowledged, or invalidated, by the wider community, or whether they perceive their situation with a sense of injustice. Shame, invalidation, and perceived injustice and their association with PTSD will each be outlined in further detail below. Sense of coherence will then be defined as a protective factor for PTSD.

C. Shame

Shame is a powerful self-conscious emotion (Tangney & Dearing, 2002) where the entire self is negatively evaluated (Kubany and Watson 2003). It is constituted of cognitive, affective, and behavioral components. The cognitions of the ashamed involve being overly critical of the self and having a painful awareness of feelings of defeat, powerlessness, deficiency, failure, smallness, and being exposed, worthless, and wounded (Lazare, 1987; Stone 1992; Øktedalen, Hagtvet, Hoffart, Langkaas, & Smucker, 2014). Some behavioral signals of shame include blushing, turning away of the face, downcast eyes, avoidance of contact, shrinking, slumped posture, and mind going blank (Lazare, 1987; Øktedalen et al., 2014; Stone, 1992; Wilson, Drozdek, & Turkovic, 2008). These actions are labeled by Clark and Wells (1995) as "safety behaviors", with the desire of the ashamed to protect the self by escaping, disappearing, and submitting.

Gilbert (1997) also distinguished between the experiences of external and internal shame, which are respectively attributed to either social or personal reference

norms. When the self-condemnation process is based on one's concern with others' evaluation of the self and their ridicule or devaluation, external shame is elicited, and one tends to withdraw to avoid rejection and marginalization. With the evolution of a self-consciousness, humans have developed the capacity to establish a relationship with the self, and are therefore able to shame and devalue their own selves, thus facilitating internal shame (Gilbert, 1997). Yet, one's own evaluations may be based on internalizing and agreeing with others' devaluation of ourselves as worthless, ugly, and inherently flawed, causing subsequent attacks on the self by the self, which is also an experience of internal shame (Gilbert 1997; Harman & Lee, 2010).

In the context of trauma, researchers have increasingly been interested in shame as a feature of posttraumatic stress disorder (PTSD). The emotional experience attributed to PTSD in the *DSM-IV-TR* (APA, 2000) was limited to fear, helplessness, and horror. However, individuals with a history of trauma report a range of other emotions including shame, anger, and sadness (Grey, Holmes, & Brewin, 2001; Holmes, Grey, & Young, 2005). This led to the shift in the diagnostic criteria from the *DSM-IV-TR* to the *DSM-5* in 2013 to include shame as a persistent negative emotional state in PTSD (APA, 2000; APA, 2013).

Gilbert's (1997) psycho-evolutionary perspective of the development and maintenance of shame offers a useful framework in understanding its role in PTSD. Gilbert suggests that shame evolved as a function to alert the self to current threat and change of status. This would subsequently elicit a submissive response in the shamed, which in turn would deescalate the attack and reduce the likelihood of further victimization. Thus, shame is seen to have evolved as a strategy to keep the self safe (Gilbert, 1997).

Stone (1992) proposed that following a trauma, shame is triggered by the realization of the self's inadequacy in coping with the capriciousness of the world. Such a realization ruptures trust in oneself, one's assessment of reality, and one's sense of connectedness and competence in the world (Janoff-Bulman, 1985, 1992). In the course of PTSD, shame is thought to be provoked and maintained by memories of the trauma and by the display of PTSD symptoms. The exaggerated startle response, crying out, anger outbursts, extreme fear, lack of control, and other behaviors that follow a trauma can be experienced as shameful or humiliating (Stone, 1992).

Brewin, Andrews, and Rose (2000) distinguish between emotions experienced during the trauma (such as fear, helplessness, and horror) and emotions experienced after the trauma (such as anger, shame, or sadness), suggesting that the latter are based on subsequent cognitive appraisals. These include personalization of the trauma and regarding it as a confirmation of the flawed self (Gilbert, 1997), and an exaggerated sense of personal responsibility and power to challenge inflicted force and violence (Furukawa & Hunt, 2011).

Furthermore, the vigilance to ongoing threat, a hallmark of PTSD, can be external and maintained by fear, whereby the world is seen as a more dangerous place, or it can be internal and maintained by shame, whereby the self is seen as powerless or socially unacceptable (Ehlers & Clark, 2000). Thus, for some individuals, PTSD symptoms are maintained by shame (Ehlers & Clark, 2000; Lee, Scragg, & Turner, 2001).

In a review on PTSD in military veterans, Gaudet et al. (2016) illustrated how shame is associated with all the criteria constituting a PTSD diagnosis as conceptualized in the *DSM-5*: reexperiencing (Stein et al., 2012), avoidance (Forbes, Creamer, Hawthorne, Allen, & McHugh, 2003; Rangganadhan & Todorov, 2010), arousal

(Gilbert, 2000), and negative cognitions and mood (Kim, Thibodeau, & Jorgensen, 2011). For example, intrusive memories of the trauma are associated with triggering regret for wrongdoing, and serve as a reminder of the incompetent self, thus eliciting feelings of shame (Stein et al., 2012). Avoidance behaviors in PTSD including withdrawal, thought suppression, emotional numbing, and social isolation can be understood as protective behaviors against negative ruminations and critical evaluations by self and others, which may trigger feelings of shame (Forbes et al., 2003; Rangganadhan & Todorov, 2010). Shame was also found to be associated with physiological hyperarousal, including aggression and anger (Gilbert, 2000; Taft et al., 2007). As previously mentioned, outbursts of anger and increased displays of aggression can be experienced as embarrassing and shameful by the traumatized individual. Finally, shame has been found to be strongly correlated with feelings of helplessness, hopelessness, self-deprecation, and sense of inadequacy, all cognitions and emotions salient in PTSD (Kim et al., 2011).

In addition to shame contributing to the maintenance of PTSD symptoms, high levels of shame also predict greater severity of those symptoms (Brewin et al., 2000; Gaudet, Sowers, Nugent, & Boriskin, 2016; Hathaway, Boals, & Banks, 2010; Van Dam, Sheppard, Forsyth, & Earleywine, 2011). Research also shows shame to be a salient component in the maintenance and severity of PTSD across different types of traumas, including war-related traumas with veterans (e.g., Nazarov et al., 2015), sexual traumas (e.g., Andrews, Brewin, Rose, & Kirk, 2000; Dyer, Fieldmann, & Borgmann, 2015; Ginzburg et al., 2009), and physical abuse (e.g., Andrews et al., 2000; Street & Arias, 2001). However, research on the role of shame in traumatized refugees is quite limited (Furukawa & Hunt, 2011). One study by Stotz, Elbert, Müller, and Schauer (2015) looked at multiple trauma exposure with refugee children. Their findings showed

that repetitive trauma exposure had a cumulative effect on negative mental health outcome generally and on the symptom severity of PTSD and pathological shame specifically (Stotz et al., 2015).

For refugees who have experienced trauma, the experience of internal shame over the traumatic event itself may also be compounded by external shame brought on by the experiences of adjusting to a new community (Eisenbruch, 1988; Sam & Berry, 1995). In a new country, refugees would have likely given up family, social support, prestige, jobs, money, stability, and status, and thus must develop new sources of self-worth (Furukawa & Hunt, 2011). Refugees may also experience internal shame by being in circumstances which conflict with their original self-perception and self-worth (Yeh, 2003). For example, they may have to accept lower paying or lower status jobs than previously held in their home country, or they may experience daily struggles with an unfamiliar language and cultural barriers in a foreign country. Refugees also experience external shame in sometimes facing rejection and negative evaluation from the host community (D'Avanzo, Frye, & Froman, 1994; Dhooper & Tran, 1998; Yeh, 2003).

Syrian refugees in Lebanon face a host community that staggeringly supports discriminatory policies against them (Harb & Saab, 2014). In some areas of Lebanon including Akkar, as high as 90% of Lebanese nationals would like to stop receiving refugees altogether, would like to see them leave immediately, and would like to forbid them access to work. Similar rates support night curfews against Syrian refugees and their restriction of political freedoms (Harb & Saab, 2014). As previously discussed, incidents of the above, including limits on access to employment, among other services, and implementation of night curfews have already materialized in the past couple of years. Moreover, it has been previously noted in the literature that collectivistic cultures

are more prone to feelings of shame (e.g., Lebanese; Ammar, 1973; Bierbrauer, 1992). Hence, in line with the literature, the experiences outlined above are expected to elicit feelings of shame among Syrian refugees in Lebanon.

D. Invalidation

Early psychological literature on invalidation was led by Linehan (1993) who postulated a *biosocial* theory of borderline personality disorder (BPD). She proposed that children who have a biological disposition toward strong negative affectivity and who experience an invalidating environment that is intolerant of the expression of their emotional experiences develop difficulty in regulating their emotions, which is one of the core features of the disorder (Linehan, 1993). Invalidation here refers to the dismissal, negation, or trivializing of an individual's experience, thoughts, and emotions (Linehan, 1993). Fruzzetti (1996) and Fruzzetti, Shenk, and Hoffman (2005) extend Linehan's biosocial theory beyond childhood and beyond invalidation by the caregiver. In their *validation/invalidation family interactions* transactional theory, Fruzzetti and Fruzzetti et al. suggest that in current meaningful adult relationships, emotional invalidation maintains symptoms of BPD.

In a study by Sturrok and Mellor (2014), aspects of Linehan's (1993) and Fruzzetti (1996) and Fruzzetti et al.'s (2005) theories were combined. Sturrok and Mellor showed that, along with emotional dysregulation and poor distress tolerance, perceived invalidation in current meaningful adult relationships mediates the relationship between perceptions of past invalidation in childhood and BPD symptoms in adulthood. In other words, continued invalidation throughout an individual's development partially predicts symptoms of BPD (Sturrok & Mellor, 2014).

Krause, Mendelson, and Lynch (2003) provide further evidence for the relationship between perceived childhood emotional invalidation from caregivers and adult psychological distress, namely, symptoms of depression and anxiety. This relationship was mediated by emotional inhibition as an adult, as exhibited by thought suppression, avoidant stress responses, and ambivalence over emotional expression (Krause et al., 2003). Krause et al. suggested that inhibition or avoidance of emotional expression develop as coping strategies during childhood for individuals who recollect a pervasive history of emotional invalidation; however, when chronic in adulthood, the same strategies can lead to distress (Krause et al., 2003). Hence, perceived childhood invalidation predicted an inhibitory style of emotional expression, which in turn predicted psychological distress (Krause et al., 2003).

Invalidation of emotional experiences has been extended to multiple contexts including, but not limited to, invalidation of sexual abuse survivors (McEvoy & Daniluk, 1995), of women with disabilities (Hassouneh-Phillips, McNeff, Powers, & Curry, 2005), of soldiers who killed at war (Webber, Schimel, Martens, Hayes, & Faucher, 2013), and beyond individual-caregiver/individual-partner relationships to peers, professionals, and communities. Its effects have been linked to various manifestations of psychological distress and pathology, including depression, anxiety, maladaptive personality structures, suicidal intent, and problematic relational patterns (e.g., Hassouneh-Phillips et al., 2005; Hong & Lishner, 2016; Krause et al., 2003; Nguyen, Ecklund, MacLehose, Veasley, & Harlow, 2012; Yen et al., 2014).

The literature also differentiates between general invalidation, which is chronic, pervasive, and insidious (Linhean, 1993) and specific invalidation, which may be anticipated following disclosure of a particularly negative event (Peter-Hagene & Ullman, 2014). General invalidation is what Linehan (1993) conceptualized as

perceived lack of warmth, perceived hostility, and perceived neglect and indifference from the environment. In contrast, specific invalidation is contingent upon disclosure of a traumatic experience, and it refers to the extent to which the individual is not listened to, not believed, and not supported, but is rather blamed for the trauma (Hong & Lishner, 2016). Hong and Lishner found both general invalidation and abuse-specific invalidation by caregivers in childhood to independently predict symptoms of depression, anxiety, and PTSD in adulthood.

Yen et al. (2014) examined the relationship between emotional invalidation of adolescents from family members and peers and future suicide events and self-mutilation. In an acute high-risk sample of adolescents in an inpatient psychiatric unit, Yen et al. found that perceived family invalidation predicted suicidal tendencies in boys, and perceived peer invalidation predicted self-mutilation in both boys and girls.

McEvoy and Daniluk (1995) took an intersectional qualitative approach to understanding the psychological outcomes of sexual abuse. Their sample consisted of aboriginal women who were sexually abused as children and who were undergoing individual or group counselling. One of the most salient themes that were identified in the women's narratives was their sense of being invalidated both as women, and as aboriginal people. Sources of the invalidation included religious and education institutions and the surrounding community (McEvoy & Daniluk, 1995). The women reported being blamed for their experience and believing that the mainstream white society had negative perceptions of native culture (McEvoy & Daniluk, 1995).

Hassouneh-Phillips et al. (2005) conducted a secondary analysis of data derived from three qualitative studies addressing the abuse of women with disabilities. Maltreatment included attitudes and behaviors of healthcare providers that resulted in psychological, physical, sexual, and/or social harm to women with disabilities

(Hassouneh-Phillips et al., 2005). Maltreatment, as delineated by Hassouneh-Phillips and McNeff (2004), in contrast to abuse, may or may not have the intent to cause harm. Invalidation was identified as the central process connecting the major themes that emerged from the data, and was consequently understood to underlie maltreatment. Invalidation was characterized as healthcare providers t*aking over*, *discounting*, and *objectifying* the women. 'Taking over' occurred when healthcare providers made decisions for the women rather than with the women, thus placing themselves in a position of authority over the women. 'Discounting' occurred when the women were not acknowledged or not listened to, either by not being talked to directly or not being believed by the healthcare providers. 'Objectifying' occurred when the women were treated merely as cases or as disease entities rather than individuals, thus dehumanizing them.

In Switzerland, organizations exist that offer citizens suicide assistance. Wagner, Keller, Knaevelsrud, and Maercker (2011) investigated the influence of perceived social acknowledgment on PTSD symptoms in family members who witnessed the assisted suicide of a relative. In the context of PTSD, social acknowledgment is conceptually opposite to invalidation, and is defined as a victim's experience of positive reactions from society that show appreciation of the victim's traumatic experience and acknowledgement of the difficulty of their situation (Maercker & Müller, 2004; Müller, Moergeli, & Maercker, 2008). Perceived lack of social acknowledgement has been shown to predict higher PTSD symptoms (Maercker & Muller, 2004). Similarly, Wagner et al. found subjective lack of social acknowledgment to predict 24% of the variance in PTSD, with the perceived disapproval of the social environment being the most pertinent factor relating to trauma-related symptoms.

The literature thus suggests that invalidation of an individual's experiences, thoughts, or emotions, whether from a caregiver, family, partner, peers, healthcare providers, or the community, renders the invalidated individual more likely to have negative outcomes including high levels of distress or pathology. To our knowledge, there is no current literature on invalidation of the refugee experience and its impact on psychological wellbeing, particularly the Syrian refugees. In addition to the personal aspects of each refugee's experience, the Syrian crisis lies at the nexus of politics, society, and history, both at a local and at a global scale. Hence, just like other traumatized populations, refugees may be at high risk for invalidation of their experiences, both for their individual and their collective traumas. Refugees may be blamed for being in their circumstance by certain fractions of the population who are politically not empathetic with refugees in the host and the international communities. They may also face negative perceptions, in addition to dismissal, or negation of their struggles.

As previously described, Syrian refugees face multiple upheavals, including experiencing an ongoing and increasingly complex war, separation from their country/community/family, integration in a new community, among others. Factions of the government and a significant portion of the population hold negative perceptions of Syrian refugees and have taken measures to substantiate these perceptions (Harb & Saab, 2014; Human Rights Watch, 2014; Reuters, 2016; The Daily Star, 2016). For example, the Lebanese government and municipalities have limited Syrians' political and social freedoms, including registration for refugee status and freedom of movement.

Globally, stances towards the Syrian refugee crisis have also been mixed, with some countries, such as Lebanon, Jordan, Turkey, and Germany, welcoming refugees in the tens and hundreds of thousands, and some countries in the Arab world not accepting

any refugees, including Kuwait, Saudi Arabia, Qatar, and Bahrain (Amnesty International, 2016). As is the case in Lebanon, the people and political parties within Europe and around the world are divided in their support for Syrian refugees (Shuster, 2016). However, the world is observing a shift to more right-wing political support (e.g., United States of America, Britain, Germany, France, Austria), and this could be partially fueled by the refugee crisis (Minsky, 2016; Shuster, 2016). Right-wing governments are typically less open to opening borders to refugees and are more rigid with their immigration policies (Minsky, 2016).

In essence, the actions and stances taken by the regional and global communities may be experienced as invalidating by the Syrian refugees in that they are not being supported but are rather blamed for their trauma. From the existing literature on the association between invalidation of traumatic experiences and severity of PTSD symptoms, the current study will examine the invalidation directed at the Syrian people from the world community and its impact on PTSD symptoms.

E. Perceived Injustice

When an individual experiences a traumatic event that is the result of someone else's actions—whether it's a result of error, negligence, or if it's intentional—the victim may experience life after the trauma with a sense of injustice (Miller, 2001; Sullivan et al., 2008). Perception of injustice is particularly salient when the victim undeservedly or unnecessarily suffers the hardship as a result of another's actions, such as an individual with a chronic disability following a motor vehicle accident (Sullivan et al., 2008). Perceived injustice is manifested in experiencing the loss as severe and irreparable, blaming the abuser/perpetrator, and perceiving the trauma as being unfair (Hamilton, & Hagiwara, 1992; Lind & Tyler, 1988; Miller, 2001; Sullivan et al., 2008).

The victim may express having suffered because of someone else’s negligence, being robbed of something very precious, and the sense that the severity of their condition is not being understood or not being taken seriously. The literature has shown that perceptions of injustice are likely to arise when an individual is exposed or subjected to a violation of basic human rights, transgression of status or rank, or challenge to equity norms and just world beliefs (Fetchenhauer & Huang, 2004; Hafer & Bègue, 2005, Mohiyeddini & Schmitt, 1997).

Individuals with posttraumatic stress disorder often report feelings of injustice towards the perpetrators, and generalize this to others and to the world, as characterized by statements such as, ‘The world is profoundly bad, people are profoundly bad’ or ‘The perpetrators are the winners—there is no justice in this world’ (Maercker & Harn, 2012). There is a mount of research linking perception of injustice with negative physical, psychosocial, and functional outcomes for survivors of physical injury (Trost et al., 2015). Elevated feelings of injustice among patients admitted to a hospital trauma center for acute trauma injury were associated with negative physical and psychological outcomes, including pain intensity, symptoms of depression, and PTSD (Trost et al., 2015). In a sample of individuals with whiplash injuries, Sullivan et al. (2009) found that perceived injustice was significantly correlated with depressive and posttraumatic stress symptoms, and that perceived injustice predicted the maintenance of posttraumatic stress symptoms. With acute injury and chronic health patients, perceptions of injustice contribute to worse physical and psychological outcomes (Scott, Trost, Bernier, & Sullivan, 2013; Trost, Vangronsveld, Linton, Quartana, & Sullivan, 2012). With individuals suffering from physical injuries following accidents, high perception of injustice was associated with higher perceptions of disability and pain intensity and higher levels of depressive symptomology (Sullivan et al., 2008).

Thus, the literature on perceived injustice has largely been focused on health-related traumas including physical injuries. On the other hand, the literature concerning injustice as experienced by people affected by war is nascent, with only a handful of studies found by the author. Coffey, Kaplan, Sampson, and Tucci (2010) interviewed asylum seekers in Australia who had been held in an immigration detention center for two or more years. Among the themes identified was a sense of injustice that was present both during and after the detention period. Participants reported being humiliated, treated with disrespect, and dehumanized (Coffey et al., 2010). Some participants also described the incomprehensibility and injustice of a system that was inconsistent in determining the duration required to grant refugee status, with some people being recognized as refugees relatively quickly and others waiting for years (Coffey et al., 2010). Perceptions of injustice were also accompanied with poor mental health outcomes, including low quality of life, and symptoms of depression, anxiety, and PTSD (Coffey et al., 2010).

To date, Syrian refugees' perceptions of injustice have not been explored. In 2015, only 2.5% of Syrian refugees around the world had been offered resettlement since the start of the Syrian crisis (Amnesty International, 2015). In Lebanon, Syrian refugees face discrimination, humiliation, racism, and unfair treatment from the community and from governmental and non-governmental organizations.

In conclusion, a number of Syrian refugees in Lebanon have experienced forced migration from their home country because of a persistent war and have experienced the loss of loved ones either due to separation or death, their families, communities, and lives as they knew them. Moreover, the Syrian refugee crisis, being political at its core, is a convoluted and controversial matter, and can consequently upheave a flood of injustices. Due to the saliency of the unjust acts being perpetrated

towards Syrian refugees (e.g., Albaster, 2016; Cambanis, 2016; Gallart, 2015; HRW, 2016) and the association of perceived injustice and PTSD symptoms found in the PTSD literature (e.g., Coffey et a., 2010; Maercker & Harn, 2012; Sullivan et al., 2009; Trost et al., 2015), the current study will investigate the relationship between perceived injustice and PTSD symptoms in Syrian refugees.

F. Sense of Coherence

Not all people who experience trauma develop posttraumatic stress disorder. To understand why some people are less likely to be adversely affected by stressful events than others, Antonovsky (1979) proposed the *sense of coherence* (SOC) construct. SOC is a way of viewing the world that facilitates coping in complex and stressful circumstances (Antonovsky, 1993). Antonovsky (1987, p. 19) defines coherence as,

> a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that (1) the stimuli deriving from one's internal and external environments in the course of living are structured, predictable, and explicable; (2) the resources are available to one to meet the demands posed by these stimuli; and (3) these demands are challenges, worthy of investment and engagement.

Antonovsky (1993) calls these components *comprehensibility*, *manageability*, and *meaningfulness*. Comprehensibility and manageability are suggested to be cognitively-based, and meaningfulness is suggested to be emotionally-based. SOC is postulated to be reflected in one's subjective sense of competency in a given environment. When an individual enjoys a strong SOC, they are likely to have high self-esteem and to function effectively. On the other hand, when an individual struggles with a weak SOC, they are likely to experience self-doubt and psychological dysfunction. Thus, SOC is expected to play a role in an individual's response to stress (Antonovsky, 1986). Furthermore, from Antonovsky's definition of the construct (1979, 1987), SOC

is understood to be a stable and generalized, or global way of seeing the world. That is not to say, though, that it is unaffected by certain impediments throughout life; SOC can be dynamic and may shift as a result of certain experiences or in certain situations (Antonovsky, 1979).

SOC is hypothesized to have two categories of determinants that Antonovksy (1979, 1987) named *generalized resistance resources* and *generalized resistance deficits*. The former includes internal and external resources such as material possessions, social support, cultural stability, fund of knowledge, ego identity (i.e., an inner sense of being stable and integrated, yet flexible and dynamic), religion, and philosophy (the reader is referred to Antonovsky's book (1979) for an extensive description of the generalized resistance resources). In contrast, generalized resistance deficits include stimuli such as events or traumas which are likely to elicit a sense of chaos and disintegration. Other researchers (Ben-Porath, 1991; Lin, Masuda, & Tazuma, 1982; Nicassio, 1985) have previously shown that limited access to resources and exposure to deficits contribute to psychological dysfunction. The concept of SOC builds upon such findings by proposing the process through which they impact functioning, that is, by altering one's perception of their environment being comprehensible, manageable, and meaningful (Ying, Akutsu, Zhang, & Huang, 1997). In other words, "[resistance] deficits challenge [one's] SOC by shaking [one's] confidence in life's predictability (comprehensibility), diminishing [one's] available resources to meet life's demands (manageability), and raising doubt about whether life's challenges [are] worth meeting and responsive to one's efforts (meaningfulness)," (Ying et al., 1997). The lowered SOC would subsequently put the individual at risk of developing psychological dysfunction.

Thus, in contrast to a pathogenic orientation of understanding health, which focuses on the factors that lead to disease, Anotnovsky's (1979, 1993) model was based on a salutogenic orientation. The salutogenic orientation to understanding health is one that attempts to understand factors that buffer stressors, and that consequently facilitate positive adaptation and good health. Indeed, Antovonsky found SOC to be a significant predictor of psychological wellbeing, life satisfaction, and reduced fatigue and loneliness. It was also found to be negatively associated with anxiety and depression and a determinant of low suicidal ideation in depressed individuals (Antonovsky, 1993).

For example, using Spielberger's (1966, 1972) model of state-trait anxiety, Antonovsky and Sagy (1986) were interested in the effect of SOC on anxiety in stress situations. According to Spielberger, trait anxiety is a chronic tendency to react with anxiety, and state anxiety is a temporary and situational emotional-behavioral reaction. They looked at the relationship between SOC and state-trait anxiety in adolescents who were to be evacuated from settlements in comparison to a group of adolescents who were living in stable communities. Antonovsky and Sagy found that in all groups, the higher the SOC, the lower the state and trait anxiety. In other words, the more an individual perceives their situation and environment as comprehensible, manageable, and meaningful, the less likely they are to be disposed to experience anxiety states and to react with anxiety. Despite this pattern, however, both groups still scored high on state anxiety, even individuals who were high on SOC. This was an expected finding since the community at large was distressed by the evacuation situation (Antonovsky & Sagy, 1986). Additionally, the experience of instability was significantly correlated with lowered coherence. These findings are particularly relevant to Syrian refugees who have suffered major upheavals during the war, flight, and new life in Lebanon.

In addition to SOC's association with anxiety in unsettling situations, several studies have investigated its association with traumatic events across different contexts. Low levels of SOC have been consistently found to be associated with higher levels of PTSD symptoms in populations including firefighters (Dudek & Koniarek, 2000), chronic disease patients (Delgado, 2007), traffic accident victims (Frommberger et al., 1999), childhood sexual abuse survivors (Renck & Rahm, 2005), survivors of war (Kimhi, Eshel, Zysberg, Hantman, & Enosh, 2010), and survivors of the Holocaust (van der Hal-van Raalte, van IJzendoorn, & Bakermans-Kranenburg, 2008).

Researchers have been particularly interested in exploring sense of coherence among survivors of war. Pham, Vinck, Kinkodi, and Weinstein (2010) were interested in explaining why only a minority of people in the Democratic Republic of Congo—which witnessed some of the worst internal and international conflicts in recent history—develop severe symptoms of psychological distress. Pham et al. explored the relationship between cumulative exposure to trauma and SOC and the relationship between SOC and symptoms of PTSD. They found an inverse association between SOC and cumulative exposure to trauma such that as the number of exposures to traumatic events increased, the weaker the SOC. Moreover, SOC was found to explain 43% of the variance in symptoms of PTSD (Pham et al., 2010).

Kimhi, Eshel, Zysberg, Hantman, and Enosh (2010) found similar results with Israelis affected by the 2006 war with Lebanon. Kimhi et al.'s results indicated that one's SOC mediated the impact of exposure to traumatic events, age, and economic situation on posttraumatic stress symptoms.

There's a line of research, albeit scarce, that explores SOC as a protective factor against psychological distress specifically among refugees (e.g., Ekblad & Wennstroem, 1997; Ghazinour, Richter, & Eisemann, 2004; Ying et al., 1997).

In a sample of psychiatric outpatient refugees and immigrants in Stockholm, Ekblad and Wennstroem (1997) found the meaningfulness subscale of SOC to be negatively correlated with trauma symptoms, anxiety, and depression. However, in their study, overall SOC was found to be very low, which was not surprising considering that the sample was in a clinical setting (Ekblad & Wennstroem, 1997).

In line with these findings are those by Ghazinour et al. (2004), who examined quality of life, psychopathological manifestations, and coping-related variables, including sense of coherence, among Iranian refugees resettled in Sweden. They found that the higher the SOC, the more likely the respondents were to report high quality of life and less psychopathological symptoms (Ghazinour et al., 2004).

Moreover, among Southeast Asian refugees residing in the U.S., Ying et al. (1997) found that protective and risk factors including gender, age, number of traumas, education level, ethnicity, English competence, and other factors, significantly predicted both SOC and psychological dysfunction. In turn, SOC significantly predicted psychological dysfunction over and above the direct effects of the protective and risk factors investigated by Ying et al.

In its multidimensional definition, SOC is distinguished from coping strategies or personality characteristics such as internal locus of control, self-efficacy, problem-oriented coping, and mastery, which are concepts that are effective in particular cultures and in response to particular stressors (Antonovsky, 1993). Rather, it is considered to be universally meaningful, cutting across lines of gender, social class, and culture (Antonovsky, 1979). Its cross-cultural nature is based on its reference to factors, and not specific coping mechanisms, which have been found to be the basis of effective coping in all cultures (e.g., social support, intelligence, wealth, cultural stability; Antonovsky, 1979, 1993). Moreover, the SOC scale developed by Antonovsky has been shown to be

a robust instrument across cultures (Almedom, Tesfamichael, Saeed, Mascie-Taylor, & Alemu, 2007; Bowman, 1996; Edwards & Besseling, 2001; Ekblad & Wennstroem, 1997).

Antonovsky (1979) views social support and a stable culture as important generalized resistance resources that strengthen an individual's SOC and in turn buffer one's ability to comprehend, manage, and make meaning out of life's challenges and demands. This, in turn, predicts one's level of adaptation and functioning in their environment. Therefore, SOC is conceptually largely dependent on the social and contextual framework that the individual is placed in, and this has been supported empirically as well (e.g., Ghazinour et al., 2004; Pham et al., 2010; Ying et al., 1997). Such a perspective is consistent with the contextual approach this study seeks to take in understanding PTSD.

Syrian refugees experienced a deeply convoluted and complex war, have witnessed or been exposed to countless atrocities, fled their home country, and settled in often unwelcoming, unstable, and unstructured communities, may have their SOC diminished, which may subsequently put them at risk of psychological dysfunction. Those refugees with a stronger SOC, on the other hand, would be expected to have higher psychological functioning.

CHAPTER III

AIMS AND HYPOTHESES

A. Aims

Apart from shame, the proposed variables of interest, namely, invalidation, perceived injustice, and sense of coherence, are nascent in the PTSD literature, particularly within the refugee population. There are a handful of theoretical models and empirical studies attempting to understand PTSD within the survivor's social and contextual frameworks. This approach can be especially useful when understanding refugee trauma because the refugee identity crosses not only the field of mental health, but also dimensions of politics, society, and history. Therefore, acknowledging and measuring refugees' perceptions of their environment can be crucial in having a more thorough understanding of their experience.

In light of the above, the proposed study aims to investigate the relationship between PTSD symptoms and the predictive variables of: shame, invalidation, perceived injustice, and sense of coherence.

B. Hypotheses

Cumulative exposure to traumatic events has been shown to predict higher severity of PTSD symptoms (Briere, Agee, & Dietrich, 2016; Finklestein & Solomon, 2009; Yehuda et al., 1995). Therefore, cumulative exposure to traumatic events will be a control variable in the model.

Hypothesis 1: Exposure to traumatic events will positively predict PTSD symptoms.

Shame has been found to predict higher symptoms of PTSD in victims of violent crime (Andrews et al., 2000) and to be associated with severity of PTSD symptoms in the refugee population (Stotz et al., 2015).

Hypothesis 2: Shame will positively predict symptoms of PTSD, such that, the more an individual experiences trauma-related shame, the higher their PTSD symptoms.

Perceived invalidation of a trauma by one's social environment has been found to predict symptoms of PTSD (Maercker & Muller, 2004; Wagner et al., 2011).

Hypothesis 3: Higher levels of perceived invalidation of trauma from the world community will positively predict symptoms of PTSD.

A traumatized individual's perceived injustice of the circumstances of their trauma has been found to predict the maintenance of PTSD symptoms (Sullivan et al., 2009) in individuals who have sustained whiplash injuries.

Hypothesis 4: Higher levels of perceived injustice surrounding the circumstances of the trauma will positively predict symptoms of PTSD.

An individual's sense of coherence has been found to predict symptoms of PTSD, such that the weaker one's sense of coherence, the more likely they were to report experiencing symptoms of PTSD (Pham et al., 2010). With refugees, one study found weak sense of coherence to be associated with higher levels of PTSD symptoms (Stockholm et al., 1997).

Hypothesis 5: High sense of coherence will negatively predict symptoms of PTSD.

CHAPTER IV

METHOD

A. Participants

To be included in the study, participants had to be Syrian refugees who were 18 years and older and who endorsed having been exposed to a violent traumatic event as a result of the Syrian war. The final sample retained for the analysis was 158. This sample is above the minimum number required for regression analysis based on Tabachnick and Fidell's (2001) recommendation of $N \geq 50 + 8m$ and $N \geq 104 + m$, where m is the number of predictor variables (this study has 6 predictors).

The sample consisted of 65.6% females, with ages ranging from 18 to 74 years (M = 32.92, SD = 12.22). Approximately 74% of the participants had some form of education, with 30% having primary-level education and only 1.9% having a university-level education. Table 1 presents detailed demographic information.

Table 1
Demographics

Variable	n	%
Age (*M*, *SD*)	32.92	12.22
Sex		
Male	54	34.4
Female	103	65.6
Marital Status		
Single	15	9.6
Married	133	84.7
Divorced	3	1.9
Widowed	4	2.5
Other*	2	1.3
Education		
None	41	26.1
Primary	48	30.6
Intermediate	55	35.0
Secondary	10	6.4

University	3	1.9
Years in Lebanon (*M*, *SD*)	3.71	1.39

*Divorced and remarried

B. Procedure

Recruitment of participants occurred in collaboration with Médecins Du Monde (MDM), an international humanitarian organization that provides physical and mental health services to Syrian refugees in Lebanon.

The research team included 3 undergraduates and 1 graduate student in Psychology at the American University of Beirut, who were supervised by the senior master's level research assistant, and the primary investigator of the study, a licensed clinical psychologist. Data collection was conducted by the 3 undergraduate and 2 graduate students, all of whom were CITI certified.

The research team recruited refugees who lived in two informal tented settlements (ITS) located in Zahleh, in the Bekaa valley region. The choice of ITS's was determined according to which settlements MDM had an ongoing working relationship with through the mental health and case management services provided to its residents. Moreover, the two ITS's that were chosen were medium-sized (approximately 100 residents), such that any eligible resident who wanted to participate would have that opportunity.

As MDM provided the research team's transportation to the ITS's, a few restrictions subsumed. Data collection was limited to Fridays only and covered a span of 8 weeks. Subsequently, this appeared to skew the sample to represent more women than men since men were likely to be either at Friday prayer or at their occupations.

The researchers initially spoke with a gatekeeper or the key authority figure of the ITS, otherwise known as "Shaweesh", explained the purpose of the study, and obtained permission to access the camp (see Appendix B for the script used with the

gatekeepers). The gatekeeper was also asked to volunteer a space in one of the tents for the research team to meet with the participants privately. Because the gatekeepers hold a position of authority in the camp, it was emphasized to them that participation of individuals was completely voluntary, and that if they chose to not permit the researchers access to the camp, or if some of the camp residents did not want to participate, this would not affect the benefits they received through MDM. The gatekeepers were not paid for their services, as it is considered a routine part of their position in managing the ITS's.

The gatekeepers suggested that the research team enlist the help of a community volunteer who was a resident of the ITS. This volunteer helped facilitate recruitment by inviting people to participate in the study. The community volunteer's role not only expedited the process of recruitment, but was also crucial in building trust between the residents and the researchers. Thus, the community volunteers and less often, the gatekeepers, verbally announced the opportunity to participate to camp residents by going door to door. Eventually, ITS residents informed each other about the study through word of mouth. Alternatively, the researchers distributed flyers to the ITS residents (see Appendix D for the flyer). Interested participants called or texted the number of the researcher on the flyer to schedule a meeting at a later date to occur in their ITS of residence. Otherwise, participants requested to participate in the same day the researchers were in the ITS. In that case, the various members of the research team were set up in different tents to meet with participants privately.

Upon meeting with the participant, the researcher provided them with an oral consent form (see Appendix A). Once oral consent was expressed, the researcher provided the participant with a copy of the oral consent form, an envelope containing the compensation (described below), followed with the battery of survey questions to

complete on a tablet using the software Qualtrics (see Appendix C). Participants were given the choice to either complete the battery themselves, or have it read to them by the researcher. This option was provided to avoid eliciting potential shame in participants who were illiterate. Most participants, including those who were literate, preferred that the researcher read the questionnaires to them. The small envelope contained LBP 10,000 as compensation for their time. This amount was determined based on consultation with the social workers and therapists at MDM and was determined to be small enough to not be too coercive and large enough to not be insulting as compensation. At the conclusion of the interview, participants were provided with a handout containing the numbers and addresses of the primary healthcare clinics where MDM provides its services (see Appendix E). Two participants reported active suicidality and were referred immediately to MDM's social workers.

C. Instruments

1. Demographics

Participants were asked to fill in their gender, age, marital status, level of education, country of origin, and number of years spent in Lebanon.

2. Exposure to Traumatic Events and Posttraumatic Stress Symptoms

Parts of an Arabic adapted version of the Harvard Trauma Questionnaire (HTQ) were used for the assessment of traumatic events and posttraumatic symptoms (Shoeb, Weinstein, & Mollica, 2007). The original instrument was developed for the assessment of exposure to war-related trauma and other organized violence and symptoms of PTSD based on the *DSM-IV* criteria among Indo-Chinese refugees (Mollica, McDonald, Massagli, & Silove, 2004). The Arabic adaptation was conducted

with 60 Iraqi refugees in the U.S. For the purposes of this study, only sections A (trauma exposure) and D (PTSD symptoms) of the adapted version were used. The *trauma events* section contains questions on experiences of 42 trauma events related to war and other organized violence, which are endorsed as "yes" or "no" (e.g., *"forced to flee your country"; "witnessed murder"*). The *trauma symptoms* section consists of 45 symptom descriptions and other culturally relevant psychological complaints experienced in the past week measured by a 4-point Likert-type scale ranging from 1 (*not at all*) to 4 (*extremely*) (e.g., *"recurrent nightmares"; "are you dayej?"*, which is a local expression). The *trauma symptoms* section of the Arabic adaptation has been shown to have good psychometric properties (Cronbach's alpha = .92) (Hijazi, 2012). The scales demonstrated very good to excellent reliability in this study, with Cronbach's alpha for the trauma events and trauma symptoms sections of the HTQ = .86 and .92, respectively.

3. Shame

An adapted version of Øktedalen et al.'s (2014) Trauma-related Shame Inventory (TRSI) was used to measure shame. The TRSI originally consists of 24 items asking for the presence of specific symptoms of trauma-related shame experienced during the past 7 days. The adapted version included 12 of the 24 items; the items that were selected were those deemed to be culturally relevant by the research team. Each item can be rated using a 4-point Likert-type scale ranging from 0 (*not at all correct about me* to 3 (*completely correct about me*). Øktedalen et al. used generalizability theory (G-theory) to assess the psychometric properties of the scale instead of Cronbach's alpha because of the latter's advantage of simultaneously estimating multiple sources of error variance in a single analysis. The G-coefficient of the scale in

Øktedalen et al.'s study was high (.87). The TRSI demonstrated excellent reliability in the current study, with Cronbach's alpha = .90.

4. Invalidation

Following a review of the literature on invalidation of trauma (e.g., Linehan's concept of invalidation) and social acknowledgment (Maercker & Müller, 2004), the items were designed rationally and adapted to the refugee experience. The items were also informed by the authors' experience working with refugees and their frequently expressed sense of invalidation by the international community. Six items were developed that represent the concept of invalidation by the world community, such as "I feel that the world community is unable to understand the magnitude of the loss and suffering of the Syrian people"; "I feel that the world community blames us for what happened to us"; "I feel that the world community denies us our right to anger". Each item can be rated using a 5-point Likert-type scale from 0 (*strongly disagree*) to 4 (*strongly agree*). The scale demonstrated good reliability in the current study, with Cronbach's alpha = .73.

5. Perceived Injustice

Sullivan et al.'s (2008) Injustice Experiences Questionnaire (IEQ) was used to assess perceptions of injustice. The IEQ is a 12-tem scale that asks participants to indicate the frequency in which they experience certain thoughts and feelings in association with their injury using a 5-point Likert-type scale ranging from 0 (*never*) to 4 (*all the time*). Sample items reflect elements of blame (*"I am suffering because of someone else's negligence"*), magnitude of loss (*"Most people don't understand how severe my condition is"*), irreparability of loss (*"My life will never be the same"*), and

sense of unfairness (*"It is all just so unfair"*). IEQ scores can range between 0 and 48 with higher scores indicating a higher perception of injustice. The IEQ's internal consistency was shown to be high (Cronbach's alpha = .92) in the original study with a sample with musculoskeletal injury (Sullivan et al., 2008). It has also been shown to be highly internally reliable (Cronbach's alpha = .95) with a heterogeneous trauma sample (Agtarap, Scott, Warren, & Trost, 2016). The scale demonstrated good reliability in the current study, with Cronbach's alpha = .77.

6. Sense of Coherence

Sense of coherence was measured with Antonovsky's (1987) 13-item short form of the Orientation to Life Questionnaire (OLQ) using a 7-point Likert-type scale. Sample items reflect comprehensibility (*"Has it happened in the past that you were surprised by the behavior of people whom you thought you knew well?"*), manageability (*"Do you have the feeling that you are in an unfamiliar situation and don't know what to do?"*), and meaningfulness (*"How often do you have the feeling that there's little meaning in the things you do in your daily life?"*). Nevertheless, the scale in its original form was not meant to be used to study component interrelations or to identify factors due to the multifaceted theoretical nature of the construct (Antonovsky, 1993). The scale has been found to have good psychometric properties (Feldt & Rasku, 1998) and good internal consistency (e.g., Cronbach's alpha = .84; Pallant & Lae, 2002). The scale demonstrated acceptable reliability in the current study, with Cronbach's alpha = .67.

All the instruments were translated to Arabic and back-translated by the primary investigator and the graduate student volunteer. The graduate student was of Syrian origin, and thus careful consideration was given to the cultural relevance of the

translated terms. Moreover, when needed, the items were read in scripted colloquial Arabic written by a Syrian native.

D. Pilot Study

A pilot study was conducted to elicit feedback regarding the appropriateness of the measures and the length of the battery. Given the limited number of weeks the research team had to collect data due to procedural restrictions with MDM, only 3 participants could partake in the piloting. Participants were recruited from the same ITS's where the rest of the data collection took place, and the administration of the survey followed the same procedure described above and was administered via tablets on the software Qualtrics. No changes were made, as the measures were determined to be clear and culturally relevant.

E. Data Analysis

This study used hierarchical multiple regression with exposure to traumatic events and sex entered in the first block, followed by invalidation, perceived injustice, trauma-related shame, and sense of coherence in the second block, with trauma symptoms as the dependent variable.

CHAPTER V

RESULTS

A. Preliminary Analysis

Preliminary analyses were conducted where the variables were examined for misentered data, missing values, univariate and multivariate outliers and the assumptions of normality and homogeneity of variance.

1. Misentered Data

Data was exported from Qualtrics directly onto SPSS, and so there was no risk of misentered data, except for the items which required a "fill in the blanks" response. As such, one participant's years of residence in Lebanon was entered as "3344" and was changed to a missing value, as per the recommendation of Tabachnick and Fidell (2014).

2. Missing Value Analysis

A total number of 160 participants was originally recruited. As per the recommendation of Tabachnick and Fidell (2014, p. 97), two participants were dropped

form the analysis due to large amounts of missing data, having responded to only 9% and 19% of the total battery[1].

A missing value analysis (MVA) indicated that all items had less than 5% missing values. The data was found to be missing at random because Little's MCAR was non-significant, $\chi^2(3594) = 3580.34$, $p = .561$, *ns*. Thirty-five of the participants had not answered at least one question. Since only a small amount of the data was missing, and it was missing at random, no imputation of the data was required.

3. Reliability Analysis

Reliability analyses were conducted for all scales after SA the reverse items. The Orientation to Life Questionnaire had acceptable reliability, whereas all other scales had high internal consistency since their Cronbach's alpha were above .70 (see Table 2).

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[1] One of the participants asked to discontinue due to distress he was feeling as a reaction to the items. This participant was given the mental health referral handout and was encouraged to reach out and seek help. The second participant was also discontinued as per the judgment call of the research investigator interviewing him. The investigator reported the participant as seemingly uninterested and inattentive, and seemed to be answering the questions in a random manner. The participant also wanted to discontinue to go to Friday prayer.

Table 2

Reliability of the Scales and Subscales: Cronbach's alpha

Scales and Subscales	Cronbach's alpha	N of items
Invalidation	.73	6
Injustice Experiences Questionnaire	.77	12
Orientation to Life Questionnaire *(Sense of Coherence)*	.67	13
Trauma-Related Shame Inventory	.90	12
Harvard Trauma Questionnaire		
Trauma Events	.86	42
Trauma Symptoms	.92	33

4. Influential Cases

Influential cases were examined by looking at Cook's distance at DFBETAs and standardized DFBETAs. All cases had values for Cook's distance, DFBETAs, and standardized DFBETAs that were less than one, and thus were of no concern.

5. Univariate and Multivariate Outliers

Univariate outliers were analyzed using z-scores. Any z-score with a value above an absolute value of 3.29 was considered a univariate outlier. Multivariate outliers were analyzed using Mahalanobis distance. No cases were found to be both univariate and multivariate outliers; therefore, all cases were retained for the analyses.

6. Outliers in the Solution

To examine the presence of outliers in the solution, standardized residuals were used (Field, 2013) at the significance level of ±3.29. In the current analysis, the standardized residuals ranged between -2.96 and 2.95, indicating that the data did not include outliers in the solution.

7. Normality

Normality of the variables was tested through examining z-scores of skewness. For the injustice variable, z-skewness was at -8.15, above the 3.29 significance level, indicating that the distribution is negatively skewed and thus normality is violated. Trauma-related shame and trauma exposure were also slightly above the significance level at 3.76 and 4.38, respectively. Normality of the variables is not a requisite for the main analysis needed in this study; therefore, this did not pose a problem. Nevertheless, the results will be interpreted with caution.

B. Scale Descriptives

The constructs' items were averaged to create a total score for each. Despite the disparity in the gender distribution of the sample, as it was 66% female, men and women in our sample did not significantly differ in their exposure to traumatic events (Table 3), or on any of the study variables (all $p > .14$), except for invalidation, in which men scored higher than women ($p = .03$).

The sample experienced an average of 14 traumatic incidents, and endorsed moderate levels of PTSD symptoms ($M = 2.44$, $SD = .59$). Approximately 22% of the sample endorsed low levels of PTSD symptoms (defined as scores averaging less than 2 on a 1-4 scale), whereas 17.2% of the sample endorsed high levels of PTSD symptoms (scores averaging higher than 3 on a 1-4 scale). Among the most common types of traumas experienced were participants being forced to flee their country ($n = 152$; 96.2%), witnessing shelling, burning, or razing of residential areas ($n = 134$; 84.8%), and suffering from lack of food or clean water ($n = 109$; 69%). Some participants who answered "no" to having been forced to flee their country responded that they *chose* to leave for their safety, and nobody forced them. Fourteen participants (8.9%) reported

witnessing a sexual abuse or rape, 32 participants (20.3%) reported witnessing torture, and 58 participants (36.7%) reported witnessing murder. Moreover, 98 participants (62%) reported having a family member or friend who was murdered or who experienced a violent death. Frequencies of all trauma incidents can be found in Appendix F.

See Table 4 for descriptive statistics on the study variables.

Table 3
Scale Descriptives by Sex

Sex		Min	Max	Mean	SD
Males	Invalidation	.00	4.00	2.88	.82
	Perceived Injustice	.67	4.00	3.27	.76
	Trauma-Related Shame	.00	2.83	.85	.84
	Sense of Coherence	1.46	6.54	3.80	1.25
	Trauma Exposure	1.00	37.00	14.82	7.82
	Trauma Symptoms	1.06	3.79	2.34	.70
Females	Invalidation	.33	4.00	2.57	.83
	Perceived Injustice	1.33	4.00	3.28	.58
	Trauma-Related Shame	.00	2.75	.97	.73
	Sense of Coherence	1.62	5.92	3.75	.92
	Trauma Exposure	4.00	29.00	14.08	5.33
	Trauma Symptoms	1.36	3.76	2.49	.52

Table 4
Scale Descriptives

	N	Min.	Max.	Mean	SD
Invalidation	157	.00	4.00	2.68	.84
Perceived Injustice	156	.67	4.00	3.27	.64
Trauma-Related Shame	152	.00	2.83	.93	.77
Sense of Coherence	151	1.46	6.54	3.76	1.04
Trauma Exposure*	143	1.00	37.00	14.34	6.31
Trauma Symptoms	144	1.06	3.79	2.44	.59
Valid N (listwise)	123				

*Mode = 12.00

C. Correlation Between Predictor Variables and Posttraumatic Stress Symptoms

The correlations between the predictor variables and the dependent variable were tested using Pearson's r coefficient for the normally distributed variables and

Spearman’s rho coefficient for the variables that violated normality (Field, 2009) (see Table 5).

All the variables of interest showed significant correlations with the outcome variable, PTSD symptoms. The largest correlation was between sense of coherence and trauma symptoms (*r* = -.68, *p* < .01), suggesting that as one has a stronger sense of coherence, they are less likely to experience traumatic symptoms. Perceived injustice, trauma-related shame, and trauma exposure, all had a significant and positive relationship with the dependent variable, with shame showing the strongest correlation (*rs* = .58, *p* < .01). There was a small significant positive correlation between invalidation and PTSD symptoms (*r* = .22, *p* < .01), indicating that as one’s sense of invalidation increases, their endorsement of trauma symptoms also increases.

A noteworthy relationship was that between sense of coherence and trauma-related shame (*rs* = -.47, *p* < .01, medium-large effect size), indicating that an individual’s weak sense of coherence is likely to be associated with high experience of trauma-related shame.

Table 5
Correlation Matrix

	1	2	3	4	5	6
1 Invalidation	-	.28**	.15*	**-.27****	.20**	**.22****
2 Perceived Injustice		-	.13*	-.29**	.06	.31**
3 Trauma-Related Shame			-	-.47**	.19**	.58**
4 Sense of Coherence				-	-.27**	**-.68****
5 Trauma Exposure					-	.36**
6 Trauma Symptoms						-

Note. The bolded numbers correspond to Pearson’s *r* correlations, and the unbolded numbers correspond to Spearman's *rho* correlations.
**p* < .05 (1-tailed), ***p* < .01 (1-tailed).

D. Main Analysis: Hierarchical Multiple Regression

A two-step hierarchical multiple regression was conducted to test hypotheses 1 through 5. The control variables, sex and exposure to trauma, were entered in the first block using the forced entry method, and the predictor variables invalidation, perceived injustice, trauma-related shame, and sense of coherence were entered in the second block, also using the forced entry method.

1. Assumptions of Regression

a. <u>Variable Type</u>

All variables were scale variables except for sex which was nominal dichotomous.

b. <u>Ratio of Cases to IVs</u>

Tabachnick and Fidell (2013) recommend that for a medium sized relationship between the independent variable (IV) and dependent variable (DV) when conducting a multiple regression, the sample size must be larger or equal to 50+8m, where m is the number of IVs. Furthermore, when testing individual predictors, the sample size must be larger than 104+m, where m is the number of IVs. Our sample was composed of 158 individuals and had 6 predictors; therefore, both conditions were met (50+8*6=98, or 104+6=110).

c. <u>Multicollinearity</u>

To check for multicollinearity, two methods were utilized: checking the correlation matrix between predictors and the Variance Inflation Factor (VIF) values. In the current study, all correlations between IVs were below .8, and all VIF values were below 10. Therefore, the assumption of multicollinearity was met.

d. <u>Normality of Residuals</u>

To test the assumption of normality of residuals for posttraumatic stress symptoms, its histogram was examined. Upon observation, the distribution was not significantly different from that of the normal bell-shaped curve. Therefore, this assumption was met (Figure 1, Appendix G).

e. Independence of Errors

In the current analysis, the Durbin-Watson value for posttraumatic stress symptoms was 2.17, which is close to the recommended value of 2 (Tabachnick & Fidell, 2013), indicating that the assumption of independence of errors was met.

f. Homoscedasticity

The residuals scatterplot (ZPRED vs ZRESID) was examined to test the assumption of homoscedasticity, revealing that the residuals were scattered evenly across all scores (Figure 2, Appendix G).

2. Hierarchical Multiple Regression

Hierarchical multiple regression was used to assess the contribution of invalidation, perceived injustice, trauma-related shame, and sense of coherence to predict levels of posttraumatic stress symptoms, after controlling for the influence of sex and trauma exposure. Sex and trauma exposure were entered at Step 1, explaining 24% of the variance in posttraumatic stress symptoms, with trauma exposure appearing as a significant predictor. After the entry of invalidation, perceived injustice, trauma-related shame, and sense of coherence at Step 2, the total variance explained by the model as a whole was 65%, F (6, 116) = 35.35, $p < .001$. The IVs of interest explained an additional 41% of the variance in posttraumatic stress, after controlling for sex and trauma exposure, $\Delta R^2 = .41$, F change (4, 116) = 33.45, $p < .001$.

In the final model, exposure to trauma, perceived injustice, trauma-related shame, and sense of coherence were statistically significant, whereas sex and invalidation were not. Sense of coherence had the largest association with PTSD symptoms (β = -.46, $p < .001$), followed by trauma-related shame (β = .31, $p < .001$), trauma exposure (β = .21, $p < .001$), and perceived injustice (β = .12, $p < .05$), respectively, thus confirming hypotheses 1, 2, 4, and 5. On the other hand, sex and invalidation were not significant predictors in the model, and thus hypothesis 3 was not supported.

Table 6
R, R^2, Adjusted R^2, SE of the Estimate, and Change Statistics

					Change Statistics				
Model	R	R^2	Adjusted R^2	SE of the Estimate	R^2 Change	F Change	df1	df2	Sig. F Change
1	.49	.24	.23	.52	.24	18.80	2	120	.00
2	.80	.65	.63	.36	.41	33.45	4	116	.00

Table 7
Regression Parameters

		Unstandardized Coefficients		Standardized Coefficients		
		B	SE	β	t	p
1	(Constant)	1.53	.20		7.55	.00
	Sex	.19	.10	.15	1.93	.06
	Trauma Exposure	.04	.01	.47**	5.93	.00
2	(Constant)	2.49	.34		7.33	.00
	Sex	.09	.07	.07	1.26	.21
	Trauma Exposure	.02	.01	.21**	3.49	.00
	Invalidation	-.03	.05	-.03	-.55	.58
	Perceived Injustice	.12	.06	.12*	1.96	.05
	Trauma-Related Shame	.24	.05	.31**	4.95	.00
	Sense of Coherence	-.26	.04	-.46**	-6.75	.00

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

CHAPTER VI

DISCUSSION

The aims of this study included investigating the levels of posttraumatic stress symptoms in a community sample of Syrian refugees in Lebanon, and understanding its association with both intrapersonal and socio-interpersonal factors, namely, invalidation, perceived injustice, trauma-related shame, and one's sense of coherence.

Approximately 17% of our sample endorsed high levels of PTSD symptoms. These results fall in the range found in Lebanese and other Middle-Eastern studies which investigated PTSD prevalence among Syrian refugees (e.g., Kazour et al., 2017; Steel et al., 2009).

Our results indicated that the predictor variables we investigated explained a large proportion of the variance in PTSD symptoms in our community sample of Syrian refugees, suggesting that these variables are important and culturally relevant. All our hypotheses about the roles of trauma exposure, perceived injustice, trauma-related shame, and sense of coherence in predicting PTSD symptoms were confirmed. The only hypothesis not confirmed was regarding the role of invalidation in predicting PTSD symptoms.

Our findings about the significant role of trauma exposure in predicting PTSD symptoms are consistent with the large body of evidence that links the two, and subsequently confirm our hypothesis. On average, our sample endorsed 14 unique types of trauma, including refugee or war-related traumas, such as being exposed to combat situations, lacking shelter, or suffering from lack of food or clean water. Some participants described additional traumatic experiences that were not mentioned in our inventory, such as being under siege, fear of snipers and checkpoints, and witnessing

burned corpses and disentangled heads. Being exposed to a traumatic event is a necessary prequel to experiencing posttraumatic stress symptoms, and as the theoretical and empirical bodies of literature suggest, repetitive exposure to different types of traumas, which characterizes a refugee's escape from war (Kira et al., 2006), increases the risk of suffering (e.g., Briere et al., 2016; Finklestein & Solomon, 2009; Yehuda et al., 1995).

Trauma-related shame was found to be associated with PTSD symptoms both at the bivariate and multivariate levels, confirming our hypothesis. Approximately 60% of the sample endorsed low levels of trauma-related shame (defined as averaging less than 1 on a 0-3 scale) with only 10% reporting high levels (averaging higher than 2 on a 0-3 scale). This was a surprising result given the salience of shame as a sequela of trauma (e.g., Andrews et al., 2000; Nazarov et al., 2015; Stotz et al., 2015), particularly in a shame-prone, collectivistic culture that characterizes many Middle Eastern societies. One possible explanation for this is that some participants may have found the shame items less relevant since the items described *individual* shamed responses to *individual* traumatic events, whereas participants felt that their war trauma was collective. Evidence for this comes from remarks provided by some participants regarding the shame inventory, such as, "Why would I feel shame? I didn't do anything wrong," or, "Why would I feel this way? Everyone had the same experience." Alternatively, it may be that the shame items used were read by the participants as too general and vague and therefore did not conjure shame feelings related to specific refugee experiences (e.g., shame of a man for losing breadwinner status, feeling inferior in the host society). Despite the sample's low endorsement of shame, however, it was the second highest predictor of PTSD symptoms in the model, which highlights the significance of shame as a central emotion in trauma (Grey et al., 2001; Holmes et al.,

2005). Interestingly, our sample's experience of trauma-related shame was highly and inversely correlated with their sense of coherence, and both of these variables were the highest contributors to this study's model. However, the directionality of this relationship cannot be determined. It may be that Syrian refugees' experience of shamefulness—insofar as they see themselves as inferior and unworthy of respect due to their traumatic histories—interferes with their ability to maintain a coherent and stable worldview under the complex and stressful circumstances they are in—a capability which is at the core of a strong sense of coherence. It could also be that suffering from a weak sense of coherence—which is also associated with low self-esteem and a shaky sense of self—leads one to feel ashamed of themselves, if they are aware of this "deficiency."

Consistent with our hypothesis, our sample's perception of injustice was found to be associated with their endorsement of PTSD symptoms, both at the bivariate level and in the final prediction model. Specifically, more than half our sample endorsed very high levels of perceiving their situation as unjust. These findings are astounding, but unsurprising, given that perceptions of injustice are likely to arise when an individual is exposed or subjected to violations of basic human rights (Fetchenhauer & Huang, 2004; Hafer & Bègue, 2005, Mohiyeddini & Schmitt, 1997), which the Syrian refugee population has been a victim of both in Syria and in Lebanon (Albaster, 2016; Cambanis, 2016; Gallart, 2015; HRW, 2016). Our findings are consistent with literature relating perceptions of injustice with PTSD symptoms (e.g., Sullivan et al., 2009; Trost et al., 2015). However, most of the extant research on perceived injustice has focused on health populations (e.g., Scott et al., 2013; Sullivan et al., 2008; Sullivan et al., 2009; Trost et al., 2012; Trost et al., 2015), and war-affected populations have only recently become of interest (e.g., Coffey et al., 2010). This is the case in spite of the expectation

that Syrian refugees might experience a sense of injustice at the severe and chronic losses they may have faced (e.g., their country, family and friends, occupations, social status), and may hold others responsible for the situation they are in (Hamilton, & Hagiwara, 1992; Lind & Tyler, 1988; Miller, 2001; Sullivan et al., 2008). In a study that involved Middle-Eastern refugee population in Australia, injustice was a theme that emerged, but it was assessed in a qualitative method (Coffey et al., 2010). Thus, the current study contributes to the nascent literature that is directly and quantitatively investigating perceptions of injustice in war-affected populations.

Our findings also showed sense of coherence to be associated with PTSD symptoms at the bivariate level and in the final model, confirming our hypothesis. Sense of coherence explained the majority of the variance in PTSD symptoms, suggesting that it is an important protective factor to consider. This is consistent with the large body of evidence that has shown the critical importance of one's sense of coherence in relation to war-related traumas (e.g., Ekblad & Wennstroem, 1997; Ghazinour, Richter, & Eisemann, 2004; Kimhi et al., 2010; Pham et al., 2010; Ying et al., 1997). Revisiting Antonovsky's concept of sense of coherence, a refugee is expected to face high levels of generalized resistance deficits, which are events or stimuli that are likely to elicit a sense of chaos. The effect of these events on one's functioning can be buffered by generalized resistance resources, which are internal and external protective factors. The Syrian war, since its inception in 2011, has exponentially grown in its complexity, and the increased involvement of various national and international parties has subsequently further complicated the political landscape. Further, Syrian refugees in Lebanon experience significant social and legal challenges that exacerbate the unpredictability and erraticism of their environment. It is thus unsurprising that those who manage to maintain a sense of comprehensibility and manageability of the war and their situation

as refugees, and manage to find meaning in it, may endorse less psychological distress. We speculate that the sense of coherence experienced by Syrian refugees may be partially accounted for by their high religiosity, which characterizes Middle Eastern populations. Religiosity is conceptually related to the sense of coherence construct as an internal generalized resistance resource (Anotonovsky, 1979), and is empirically found to be associated with it as well (e.g., Anyfantakis et al., 2015; López, Camilli, & Noriega, 2015)

Inconsistent with our hypothesis, perceived invalidation from the world community was not a significant predictor of PTSD symptoms in our model, despite being significantly correlated with it at the bivariate level. In the literature, a traumatized individual's experience of invalidation from surrounding individuals and groups has been linked to poor psychological outcomes (e.g., Hassouneh-Phillips et al., 2005; Nguyen et al., 2012; Yen et al., 2014). As assessed for in this study, however, both the source and recipient of invalidation were groups, the latter being "the world community," and the former being "the Syrian people." It could be that collective invalidation is related to PTSD symptoms (as evidenced by their significant bivariate correlation), but that in our final regression model, other variables better accounted for it. One possible account for this is that the other variables—shame, perceived injustice, and sense of coherence—may have touched more on an idiosyncratic, individual experience, whereas invalidation was more of a collective experience. Given its high correlation with the rest of the predictor variables at the bivariate level, another possible explanation could be that the relationship between invalidation and PTSD symptoms may have been mediated by the other variables. For example, if one feels invalidated, they may be more likely to experience shame, which in turn may predict PTSD symptoms.

A. Practical Implications

To our knowledge, this is the first study investigating environmental and individual-level factors and their influence on posttraumatic stress symptoms with Syrian refugees. In our model, sense of coherence and trauma-related shame were the strongest predictors of posttraumatic stress symptoms. Although our findings are preliminary and correlational, and therefore need further research support, they suggest that interventions that build on mechanisms that support the sense of coherence and reduce experiences of shame in refugees may be helpful in reducing psychological distress.

For example, the UNHCR recently piloted a program in which refugees are provided regular cash assistance (Hagen-Zanker, Ulrichs, Holmes, & Nimeh, 2017). A report by the Overseas Development Institute showed that almost all beneficiaries used the money to pay rent and, to a lesser extent, utility bills, and almost a third of them reported lower anxiety as a result (Hagen-Zanker et al., 2017). Such an intervention might thus offer individuals some control over their shelter and food—subsequently allowing for one's environment to be more manageable in a way that may alleviate individual shame. Therefore, as others have suggested (e.g., Pham et al., 2010; Ying et al., 1997), programs implemented by humanitarian agencies may focus on strengthening sense of agency and functioning to foster psychological health. Specifically, community-based interventions may be most feasible in a refugee context, where limited resources would serve more effectively for group rather than individual-based interventions (Silove, Ventevogel, & Rees, 2017).

The findings also suggest that structural and environmental changes must be implemented, including allowing refugees more opportunities for employment and providing more decent and sustainable living conditions.

As for perceptions of injustice, ultimately, the most important contributor will be the cessation of discrimination and injustices inflicted upon refugees from the surrounding community, governmental agencies, and the international community.

B. Limitations

This study had several limitations. We evaluated Syrian refugees in two medium-sized ITS's in the Bekaa region of Lebanon using convenience sampling, and did not investigate across other regions, so the findings generated from this study may not be representative of the Syrian refugee population. Additionally, our sample consisted of slightly more women than men; however, the two groups did not differ significantly on the measures of the study, except for invalidation, and gender was controlled for in the multivariate analyses. Nevertheless, the gender ratio of our sample does not represent the actual Syrian refugee population, and therefore, subsequent generalizations of the findings beyond this study's sample may not be appropriate.

Another potential issue with the sample regards the men who participated. Reasons for the disparity of the sexes in the sample included men being at their jobs or at Friday prayer, since data collection took place only on Fridays. Thus, those who may have been less inclined to attend Friday prayer or less able to or inclined to work were those men who were part of the sample, and they may differ from the men who did not participate. This again raises the issue of the representation of the sample.

Moreover, data collection took place during the month of Ramadan. Therefore, it could be that intricacies relating to Ramadan may have skewed the results in a particular direction.

We had some concern regarding the complexity and nuance of some of the constructs, like sense of coherence, particularly given the low educational level of more than half the sample. To ameliorate this, the researchers encouraged participants to ask clarification questions, which the participants were open to doing.

The vast majority of the sample—even those who were literate—preferred having the questionnaires read to them by the researchers. This raises a potential concern regarding the social desirability effect, which may be particularly salient considering the power differences between the researchers and the participants. The researchers attempted to circumvent this problem by building rapport prior to beginning the battery and by encouraging participants to respond truthfully while reminding them of their right to skip any uncomfortable question.

The researchers explained that this study was about the Syrian war and the refugee experience when describing the study to participants and during the consent process. However, some of the study measures, such as those assessing shame and injustice, ask about these experiences in the context of general, non-specified traumas. It is therefore difficult to determine if participants conjured war-related traumas when responding to these measures.

Finally, the cross-sectional nature of this study does not allow us to draw directional inferences of the relationships measured (e.g., whether stronger sense of coherence protects against PTSD symptoms, or higher PTSD symptoms weakens sense of coherences).

C. Future Directions

Future research can distinguish between collective and individual trauma—and different types of individual trauma—and their association with the variables of interest. This would aim to delineate whether there is a distinction in the impact of different types of trauma on an individual's experience of shame, invalidation, perceived injustice, and sense of coherence, and subsequently on their psychological functioning.

Researchers can also examine more closely the association between the different domains of sense of coherence and their relationship with PTSD symptoms. Moreover, religiosity may explain sense of coherence being a protective factor against poor psychological outcomes, and further studies can elucidate this relationship.

D. Field Lessons and Recommendations

A few lessons learned from the field will be outlined for future research recommendations. Given the particular vulnerability of the Syrian refugee population in Lebanon at the time of data collection, careful consideration was given to building trust between the ITS residents and the research team. Specifically, some residents reported having regrettable experiences with previous research projects conducted by parties unknown to the current research team, whereby the participants' anonymity was not preserved, and those who were illegal residents subsequently faced legal challenges. This experience, in addition to a recent raid by the Lebanese armed security forces at one of the ITS's that was visited, left the camp residents suspicious of "outsiders" inspecting them. Therefore, having a community volunteer assist in the recruitment of participants was crucial for facilitating recruitment and allowing for trust to be built. Moreover, the research team was sure to highlight the private, confidential, and

anonymous nature of the study, and delineated the rights of participants that are mentioned in the consent form.

Another observation regarding methodological challenges was in reference to the Likert-type scales used for data collection. A large portion of the participants had difficulty "quantifying" their experiences, and didn't find the distinction between the different numbers on the Likert scale helpful or meaningful. Therefore, to facilitate the process, while the researchers read the questionnaires, index cards were presented to participants (Appendix H), which participants could use as visual representation of their possible responses. At the same time, this raises larger questions about the cross-cultural portability of Likert-based quantitative methods. One suggestion to accommodate for this challenge is to minimize the range of the scale, such that a 1-5 range may be more desirable than a 1-7 range. More broadly, all research may benefit from employing mixed methods research designs, since qualitative approaches may detect certain nuances in the population's experiences that are not captured solely by quantitative methods.

Finally, in devising the methodology for the current project, consultation with an organization that works directly with the community and is familiar with the intricacies of the culture provided us with invaluable input related to strategy, recruitment, and re-imbursement. Therefore, it is recommended that when conducting field research with refugees, researchers collaborate or consult with experienced local or community-based organizations.

The reader is referred to Harb (2017) for additional recommendations regarding recruitment, data collection, and questionnaire designs with Middle-Eastern populations.

E. Conclusion

In the current study, approximately 17% of Syrian refugees endorsed high levels of PTTSD symptoms. A large proportion of the variance in PTSD symptoms was explained by exposure to trauma, perceptions of the traumatic situation as unjust, experience of trauma-related shame, and sense of coherence. Our findings therefore highlight the importance of both refugees' internal experiences as well as their social and political environmental conditions on their vulnerability to psychological distress. Our findings contribute to growing research on mental health in refugee populations in general, and in Middle Eastern and Syrian refugees in particular. Our findings also contribute to growing research about variables such as perceived injustice that have not been as extensively studied in their association with traumatic stress symptoms.

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APPENDIX A: ORAL CONSENT FORM

You have been invited to participate in this research study. The study is conducted by Alaa Hijazi, an assistant professor, in the Department of Psychology at AUB, in collaboration with Medecins Du Monde. In this research study we are inviting 350 adult Syrian refugees above the age of 18 who live in Bekaa Valley to participate because we are assessing the prevalence of depressive and Post Traumatic Stress symptoms and psychological factors that are related to them.

Before we begin, I would like to take a few minutes to explain why I am inviting you to participate and what will be done with the information you provide. You will be asked to fill out questionnaires about stress symptoms, depression symptoms, the types of traumas you have encountered, feelings of shame related to what you pass through, how much you feel the world has been unfair to you and your perceptions of the world around you.

Participation in this study is entirely voluntary. Refusal to participate will involve no penalty or loss of benefits or relationship with AUB/AUBMC and Medecins Du Monde in any way. If at any time and for any reason you would prefer not to answer any questions, please feel free to skip those questions. If at any time you would like to stop participating, please tell me. We can take a break, stop, and continue at a late date, or stop altogether. You will not be penalized for deciding to stop participation at any time.

The Institutional Review Board monitors records and may audit them. However, please note that your individual privacy and confidentiality of the information you provide will be maintained at all times and in all published and written data analysis resulting from the study. To ensure your privacy and confidentiality, I will meet alone with you in a private room at the primary health care clinic or privately in one of the tents.

You will not directly benefit from participating in this study. However, information from this study may benefit other Syrian refugees now or in the future by helping us understand the kinds of stress and hardships they encounter. This might inform NGO's when they are designing and planning programs that provide psychosocial support for Syrian refugees in Lebanon.

By taking part in this study, you may experience the following risks: Answering questions about your stressful experiences or painful memories may cause you to feel some anxiety and sadness. However, we anticipate that any discomfort you experience will pass quickly.

You will receive 10,000 LL for participating in the study, and it will be given to you, along with a copy of this form, now after we are done reading this form. Your transportation fees will also be covered. The study will take no more than an hour of your time.

If you have any questions, you are free to ask them now. If you have questions, concerns, or complaints about this research study later, you may contact Dr. Alaa Hijazi at 01-350000 ext 4670, email ah177@aub.edu.lb.

If you are not satisfied with how this study is being conducted, or if you have any concerns, complaints, or general questions about research or your rights as a participant, please contact the AUB Social & Behavioral Sciences Institutional Review Board (SBSIRB) at AUB: 01-350000 Ext. 5444/5445

نموذج الموافقة الشفهية على الاشتراك في دراسة

أنت مدعوّ للمشاركة في دراسة بحثية عن أعراض الضغط النفسي عند اللاجئين السوريين في البقاع. تجرى هذه الدراسة من قبل الجامعة الأميركية في بيروت، بالتعاون مع منظمة أطباء العالم، وتشرف عليها الدكتورة المساعدة آلاء حجازي. يقدّر عدد المشاركين المدعوين من اللاجئين السوريين الراشدين الذين يبلغ عمرهم فوق 18 سنة في البقاع بحوالي الـ350 مشارك. نود تقييم نسبة أعراض الضغط النفسي ما بعد صدمة وأعراض الاكتئاب والعوامل النفسية المتعلقة بهم عند هذه العينة.

قبل أن نبدأ، أودّ أن نأخذ بضعة دقائق لأشرح سبب دعوتي لك للمشاركة في هذه الدراسة وماذا سيُفعل بالمعلومات التي ستقدّمها عن نفسك. سيُطلب منك أن تملأ استبيان عن أعراض ضغوطاتك، أعراض الاكتئاب، أنواع الصدمات التي تعرضت لها، مشاعر بالخزي مما حصل، كم ترى أن العالم كان ظالماَ بحقّك، وكيف تشعر تجاه محيطك والعالم من حولك.

المشاركة في هذه الدراسة طوعية بالكامل. رفضك للمشاركة لن يؤثر على علاقتك مع منظمتي الجامعة الاميركية/مستشفى الجامعة الاميركية و أطباء العالم ولن يلغي أي خدمات تحصل عليها منهم. إذا أردت أن توقف مشاركتك في أي وقت، الرجاء إخباري. يمكننا اخذ راحة قصيرة، التوقف واكمال الدراسة في وقت اخر، او وقف الدراسة كلياً. بإمكانك أن تتوقف عن الإجابة متى ما شئت، أو أن تترك سؤالاً لا ترغب بالإجابة عليه دون أن يؤثر ذلك على الخدمات التي تقدمها منظمة أطباء العالم والتي هي من حقك.

مجلس المراجعة المؤسسية في الجامعة الامريكية يراقب و أحياناً قد يدقق في سجلات الدراسة، لكن نود التأكيد لك أن الأجوبة التي سوف تقدمها، بما تتضمنه من معلومات خاصة سوف تحفظ بسرية تامة في كل الظروف و لن يتم مشاركتها في أي ورقة أو تحليل سينشر عن هذه الدراسة. للحفاظ على خصوصيتك سوف نلتقي انا وانت بمفردنا في غرفة عيادة او في خيمة خاصة دون وجود أحد أخر.

لن تحصل على أي فوائد مباشرة لدى مشاركتك لهذه الدراسة. ولكن بالمقابل المعلومات التي سوف تقدمها ستكون ذات فائدة للاجئين السوريين في البقاع ولبنان. اذ أننا نودّ أن نقيّم أنواع وحجم الضغوطات التي يمر بها اللاجئون مما سيساعد المنظمات الإغاثية أن تضع برامجاً وخططاً أكثر فعالية ومنفعة بالمستقبل.

عند مشاركتك في هذه الدراسة من الممكن أن تكون عرضة لان تشعر بحزن أو قلق أثناء إجابتك على بعض الأسئلة أو أن تتذكر بعض المواقف المؤلمة في حياتك، لكن هذه الأعراض ستزول غالباً خلال وقت قصير

سوف تحصل على 10000 ليرة لبنانية لاجابتك على هذا الاستبيان، و سوف يتم إعطاؤك المبلغ ونسخة من هذا النموذج الان بعد انتهاءنا من قراءته. سوف أيضا يتم تغطية تكاليف النقل كاملة. لن تستغرق الدراسة أكثر من ساعة من وقتك.

إذا كان لديك سؤال بإمكانك طرحه الآن. إذا كان لديك أسئلة، مخاوف أو شكوى لاحقاً فبإمكانك الاتصال مع الدكتورة آلاء حجازي على هذا الرقم: 000 350 01، ثم اطلب رقم الداخلي: 4670. بإمكانك أيضاً التواصل على بريدها الإلكتروني:ah177@aub.edu.lb

إذا كنت غير راضي عن طريقة إجراء الدراسة، أو إذا كان لديك أي شكاوى أو مخاوف أو أسئلة عامة عن حقوقك كمشارك. بإمكانك التواصل مع مجلس المراجعة المؤسسية في الجامعة الأميركية في بيروت على هذا الرقم: 000 350 01، ثم اطلب رقم الداخلي: 5444 أو 5445

APPENDIX B: SCRIPT TO APPROACH SHAWEESH

Hello __________my name is _________ and I'm a researcher at the American University of Beirut. I am also collaborating with the organization Medecins Du Monde. We are conducting a study where we are inviting 350 Syrian refugees who live in Bekaa Valley to participate because we are assessing the prevalence of depressive and posttraumatic stress symptoms and psychological factors that are related to them.

I would like to inform you that participation in this study is entirely voluntary. If you choose to not permit the research team access to the camp, or if camp residents refuse to participate, this will involve no penalty or loss of benefits or relationship with either Medecins Du Monde or AUB/AUBMC in any way. Participants will also have the right to stop participating and skip any questions they don't wish to answer.

Participating in the study will involve completing questionnaires about one's stress symptoms, depression symptoms, the types of traumas they have encountered, feelings of shame related to what they passed through, and their perception of the world around them. Completion of this study is expected to take no longer than an hour and participants will receive a 10,000 Lebanese Liras as a gift for their time. They will also be provided with full coverage of transportation fees if they participate in a primary healthcare clinic.

I was wondering if I can talk to you about obtaining permission to conduct this study in your camp and if so, if it is possible for both of us to discuss ways to inform participants about it? If so, one way we can do that is to distribute these flyers among the camp residents, or for you to verbally announce that there is research opportunity.

نوذج للتحدث مع الشاويش في المخيم

مرحباً__________. أنا اسمي__________ و انا من الفريق البحثي في الجامعة الأمريكية في بيروت وأتعاون أيضاً مع منظمة أطباء العالم. نحن نقوم بدراسة بحثية ندعو فيها حوالي 350 لاجيء سوري يعيشون في البقاع للمشاركة. هذه الدراسة تهدف إلى تقييم نسبة أعراض الضغط النفسي ما بعد الصدمة و أعراض الاكتئاب والعوامل النفسية المتعلقة بهم عند اللاجئين السوريين.

أود إعلامك ان المشاركة في هذه الدراسة طوعية بالكامل وأن رفضك لاستقبال فريق البحث في المخيم أو رفض أي شخص للمشاركة لن يؤثر على علاقته مع أي من منظمتي أطباء العالم والجامعة الأميركية/مستشفى الجامعة الاميركية ولن يلغي أي خدمات يحصل عليها منهما. إضافةً على ذلك، فإنه يحق للمشاركين أن يتوقفوا عن الاجابة في أي وقت شاءوا وان يتركوا اجابة اسئلة لا يريدون الاجابة عليها.

المشاركة في هذه الدراسة تتضمن مليء استبيان عن أعراض الضغط التي يمر بها الشخص، أعراض الاكتئاب، أنواع الصدمات الذي تعرض لها، مشاعر بالخزي مما حصل، وشعوره تجاه محيطه والعالم من حوله. نتوقع ان الاجابة عن الاسئلة لن تستغرق أكثر من ساعة والمشاركين سيحصلون على 10000 ليرة لبنانية كهدية لمشاركتهم. سوف يتم تغطية تكاليف النقل كاملة بحال كانت المشاركة بأحد المستوصفات.

كنت أتساءل إذا كان بإمكاني اخذ اذنك في القيام بهذه الدراسة في المخيم وعليه ان كان بإمكاني التحدث معك عن الطرق التي يمكن بها اخبار المشاركين عن هذه الفرصة؟ فكرت بطريقتين، احداهما انه بإمكاني توزيع هذه الورقة على ساكني المخيم لإعلامهم بهذه الفرصة، والطريقة الثانية هي ان تقوم حضرتك بإعلان هذه الفرصة شفهيا في المخيم.

APPENDIX C: INSTRUMENTS

HARVARD TRAUMA QUESTIONNAIRE

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

Part I: Trauma Events
Please indicate whether you have experienced any of the following events (check "YES" or "NO" for each column).

	Yes	No
1. Oppressed because of ethnicity, religion, or sect		
2. Present while someone searched for people or things in your home.		
3. Searched arbitrarily		
4. Property looted, confiscated, or destroyed		
5. Forced to leave your hometown and settle in a different part of the country with minimal services		
6. Imprisoned arbitrarily		
7. Suffered ill health without access to medical care or medicine		
8. Suffered from lack of food or clean water		
9. Forced to flee your country		
10. Expelled from country based on ancestral origin, religion, or sect		
11. Lacked shelter		
12. Witnessed the desecration or destruction of religious shrines or places of religious instruction		
13. Witnessed the arrest, torture, or execution of religious leaders or important members of tribe		
14. Witnessed mass execution of civilians		
15. Witnessed shelling, burning, or razing of residential areas or marshlands		
16. Witnessed chemical attacks on residential areas or marshlands		
17. Exposed to combat situation (explosions, artillery fire, shelling) or landmine.		
18. Serious physical injury from combat situation or landmine		
19. Used as a human shield		
20. Serious physical injury of family member or friend from combat		

situation or landmine		
21. Witnessed rotting corpses		
22. Confined to home because of chaos and violence outside		
23. Witnessed someone being physically harmed (beating, knifing, etc.)		
24. Witnessed sexual abuse or rape		
25. Witnessed torture		
26. Witnessed murder		
27. Forced to inform on someone placing them at risk of injury or death		
28. Forced to destroy someone's property		
29. Forced to physically harm someone (beating, knifing, etc.)		
30. Murder or violent death of family member (child, spouse, etc.) or friend		
31. Forced to pay for bullet used to kill family member		
32. Received the body of a family member and prohibited from mourning them and performing burial rites		
33. Disappearance of family member (child, spouse, etc.) or friend		
34. Disappearance or kidnapping of a family member or a friend		
35. family member (child, spouse, etc.) or friend taken as a hostage		
36. Someone informed on you placing you and your family at risk of injury or death.		
37. Physically harmed (beaten, knifed, etc.)		
38. Kidnapped		
39. Taken as a hostage		
40. Sexually abused or raped		
41. Tortured (i.e., while in captivity you received deliberate and systematic infliction of physical and/or mental suffering)		
42. Please specify any other situation that was very frightening or in which you felt your life was in danger:		

Part II: Trauma Symptoms

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

	Not at all (1)	A little (2)	Quite a bit (3)	Extremely (4)
1. Recurrent thoughts or memories of the most hurtful or terrifying events				
2. Feeling as though the event is happening again				
3. Recurrent nightmares				
4. Feeling detached or withdrawn from people				
5. Unable to feel emotions				
6. Feeling jumpy, easily startled				
7. Difficulty concentrating				
8. Trouble sleeping				
9. Feeling on guard				
10. Feeling irritable or having outbursts of anger				
11. Avoiding activities that remind you of the hurtful event				
12. Inability to remember parts of the most hurtful events				
13. Less interest in daily activities				
14. Feeling as if you don't have a future				
15. Avoiding thoughts or feelings associated with the hurtful events				
16. Sudden emotional or physical reaction when reminded of the most hurtful events				
17. Troubled by bodily pain or physical problems				
18. Feeling that you are the only one who suffered these events				
19. Feeling guilty for having survived				
20. Blaming yourself for things that have happened				
21. Spending time thinking why these events happened to you				
22. Feeling a need for revenge				
23. Feeling others are hostile to you				
24. Feeling no trust in others				

25. Feeling that you have no one to rely upon				
26. Feeling powerless to help others				
27. Feeling that you are a jinx to yourself and your family				
28. Finding out or being told by other people that you have done something that you can't remember				
29. Feeling as though you are split into two people and one of you is watching what the other is doing				
30. Are you dayej (local expression)				
31. Is your heart constricted?				
32. Do you feel shortness of breath as if you are going to suffocate?				
33. Is your psyche tired?				

استبيان هارفارد للإصابات والأعراض النفسية

إرشادات:

نود أن نسألك عن قصة معاناتك السابقة والأعراض التي تشكو منها حالياً. كما أن هذه المعلومات تساعدنا على تزويدك بعناية أفضل. قد تجد بعض هذه الأسئلة مزعجاً أو محرجاً. فعند ذلك لك مطلق الحرية في عدم الإجابة. و اطمئن أن هذا لن يؤثر في برنامج علاجك. كما أن إجاباتك على هذه الأسئلة سوف تحفظ في سرية تامة.

الجزء الأول: الحوداث المؤلمة

نرجو أن تذكر إن كنت قد تعرضت لأي من الحوادث التالية (ضع علامة √) في العمود المناسب تحت "نعم" أو "لا".

	نعم	لا
1- هل تعرضت للاضطهاد بسبب عرقك، دينك، أو مذهبك		
2- هل تم تفتيش دارك بحضورك بحثاً عن أشخاص أو أشياء		
3- هل فتشت اعتباطاً		
4-هل تم نهب ممتلكاتك الشخصية أو مصادرتها أو تدميرها		
5- هل فرض عليك الرحيل من مدينتك والسكن في منطقة أخرى تقل فيها		

الخدمات		
6- هل سجنت اعتباطاً		
7- هل عانيت من عدم امكانية حصولك على الرعاية الطبية أو الدواء خلال مرضك		
8- هل عانيت من عدم وجود الطعام أو المياه الصافية		
9- هل اضطررت للهروب من بلدك		
10- هل فرضت عليك الهجرة من بلدك بناءً على أصل أجدادك، دينك أو مذهبك		
11-هل لم يكن لديك مسكن (مشرد)		
12- هل شاهدت انتهاك حرمة العتبات المقدسة أو المراكز الخاصة بدينك أو مذهبك أو تدميره		
13- هل شاهدت اعتقال شخصيات مهمة من عشيرتك، دينك، أو طائفتك أو تعذيبهم أو إعدامهم		
14- هل شاهدت إعداماً جماعياً للمدنيين		
15- هل شاهدت قصف الأماكن السكنية أو الأهوار أو إحراقها أو تدميرها		
16- هل شاهدت هجمات كيميائية على الأماكن السكنية أو الأهوار		
17- هل تعرضت لأجواء القتال\حالة حرب (انفجارات، قصف، شظايا) أو للألغام		
18- هل أصبت إصابة جسمية خطيرة بسبب التعرض لأجواء القتال\حالة حرب\ ألغام		
19- هل استخدمت كدرع بشري		
20- هل أصيب أحد أفراد عائلتك أو أصدقائك إصابة جسمية خطيرة بسبب أجواء قتال\حالة حرب أو ألغام		
	نعم	لا
21- هل شاهدت جثث متعفنة		
22- هل أجبرت على البقاء في الدار بسبب الفوضى و العنف في الخارج		
23- هل شاهدت شخصاً ما يتعرض للأذى الجسمي (الضرب، الطعن، ...الخ)		
24- هل شاهدت عملية إساءة جنسية أو اغتصاب		
25- هل شاهدت حالة تعذيب		
26- هل شاهدت حالة قتل		

27- هل أجبرت على التبليغ عن شخص ما مما عرضه لخطر الإصابة أو الموت		
28- هل أجبرت على تدمير ممتلكات شخص آخر		
29- هل أجبرت على إلحاق الأذى الجسمي (الضرب، الطعن ..الخ) بشخص ما		
30- هل قتل أحد أفراد عائلتك (طفلك، زوجك، الخ) أو صديقك أو مات نتيجة العنف		
31- هل أجبرت على دفع قيمة الطلقة المستخدمة لقتل أحد أفراد عائلتك		
32- هل أستلمت جثة أحد أفراد عائلتك ومنعت من البكاء و إقامة الجنازة عليه		
33- هل اختفى أحد أفراد عائلتك (طفلك، زوجك، أو صديقك..الخ)		
34- هل اختطف أحد أفراد عائلتك (طفلك، زوجك، أو صديقك..الخ)		
35- هل أخذ أحد أفراد عائلتك (طفلك، زوجك..الخ) أو صديقك كرهينة		
36- هل بلغ شخص ما عنك مما عرضك لخطر الأصابة أو الموت		
37- هل تعرضت للأذى الجسمي (الضرب، الطعن، ..ألخ)		
38- هل اختطفت		
39- هل أخذت كرهينة		
40- هل تعرضت للإساءة الجنسية أو اغتصبت		
41- هل تم تعذيبك، بمعنى أثناء وجودك في الأسر تعرضت إلى المعاناة النفسية أو الجسدية بشكل متعمد و منتظم)		
42- نرجو أن تحدد أي مواقف أخرى مخيفة أو شعرت عندها أن حياتك معرضة للخطر		

أعراض الشدة

إن الأعراض التالية هي أعراض يشعر بها أحيانا الأشخاص الذين تعرضوا لحوادث مؤلمة أو مفزعة في حياتهم. الرجاء قراءة كل بند بدقة، وتحديد مدى معاناتك من هذه الأعراض خلال **الأسبوع الماضي** بوضع علامة(√)في المربع المناسب.

	لا أبداً	قليلاً	إلى حدٍ	بشدة

	(1)	(2)	ما (3)	(4)
1- هل تعاودك الذكريات والأفكار لأكثر الحوادث ألماً و فزعاً				
2- هل تشعر و كأنك تعيش الحادثة مرة أخرى				
3- هل تأتيك كوابيس متكررة				
4- هل تشعر بالانفصال أو الانعزال عن الناس				
5- هل تجد نفسك غير قادر على الإحساس بالعواطف				
6- هل تجد نفسك سريع الجفلان أو الاستثارة				
7- هل تجد صعوبة في التركيز				
8- هل تجد صعوبة في النوم				
9- هل تجد نفسك متوجساً أو على حذر				
10- هل تجد نفسك سريع الانفعال أو تنتابك سورات من الغضب				
11- هل تتجنب الأعمال التي تذكرك بالحادثة المؤلمة				
12- هل تجد نفسك غير قادرعلى تذكر بعض الوقائع لأكثر الحوادث ألماَ				
13- هل تجد نفسك أقل اهتماماً بالأعمال اليومية				
14- هل تشعر و كأنه لا مستقبل لك				
15- هل تتجنب الأفكار أو الأحاسيس المرتبطة بالحوادث المؤلمة				
16- هل تشعر بردة فعل في مشاعرك أو جسمك عند تذكيرك بالحوادث المؤلمة				
17- هل تعاني من آلام أو مشاكل جسمية				
18- هل تشعر أنك الوحيد الذي عانى مثل هذه الحوادث				
19- هل تشعر بالذنب لأنك نجوت و ما زلت على قيد الحياة				
20- هل تلوم نفسك على ما حدث				
21- هل تتساءل لماذا قدّر الله لك أن تواجه مثل هذه الحوادث				

22- هل تشعر بالحاجة للانتقام				
23- هل تشعر أن الآخرين عدائيون تجاهك				
24- هل ليست لديك ثقة بالآخرين				
25- هل تشعر أنك لا تستطيع الاعتماد على أي شخص إلا الله				
26- هل تشعرأنك عاجزعن مساعدة الآخرين				
27- هل تشعر أنك جلبت السوء على نفسك أو عائلتك				
28-هل اكتشفت بنفسك أو أخبرك أحد أنك قمت بعمل لا تستطيع أن تتذكره				
29- هل تشعر أنك انقسمت إلى شخصين، وأن أحدهما يراقب ما يفعله الآخر				
30- هل أنت ضايج				
31- هل قلبك مقبوض				
32- هل تشعر بضيق النفس وكأنك على وشك الاختناق				
33- هل نفسيتك تعبانة				

TRAUMA-RELATED SHAME INVENTORY

Rate the frequency of the symptoms below during the past seven days

	Not true of me	Somewhat true of me	Mostly true of me	Completely true of me
As a result of my traumatic experience, I have lost respect for myself	0	1	2	3
I am ashamed of myself because of what happened to me	0	1	2	3
If others knew what happened to me, they would view me as inferior	0	1	2	3
I am so ashamed of what happened to me that I sometimes want to escape from myself	0	1	2	3
If others knew what had happened to me, they would look down on me	0	1	2	3
As a result of my traumatic experience, there are parts of me that I want to get rid of	0	1	2	3
Because of my traumatic experience, I feel inferior to others	0	1	2	3
If others knew what happened to me, they would be ashamed of me	0	1	2	3
As a result of my traumatic experience, a part of me has been exposed that others find shameful	0	1	2	3
My traumatic experience has revealed a part of me that I am ashamed of	0	1	2	3
As a result of my traumatic experience, I don't like myself	0	1	2	3
I am so ashamed of what happened to me that I sometimes want to become invisible to others	0	1	2	3

Trauma–Related Shame Inventory

حدد مدى شعورك بهذه العوارض خلال الأيام السبع الماضية

	لا ينطبق علي إطلاقاً	ينطبق علي بعض الأحيان	ينبطق علي غالباً	ينطبق علي دائماً
1) بسبب تجربتي الصادمة خسرت احترامي لنفسي	0	1	2	3
2) أشعر بالخزي بسبب ما جرى لي	0	1	2	3
3) اذا علم الآخرون بما جرى لي سيعتبرونني أقل شأناً	0	1	2	3
4) أشعر بالكثير من الخزي مما جرى لي لدرجة اني اريد الهروب من نفسي احيانا	0	1	2	3
5) اذا علم الآخرون بما جرى لي سينظرون إلي بازدراء و احتقار	0	1	2	3
6) نتيجة تجربتي الصادمة هناك أجزاء مني أريد التخلص منها	0	1	2	3
7) بسبب تجربتي الصادمة أشعر أني أقل شأنا من الآخرين	0	1	2	3
8) اذا علم الآخرون بما جرى لي سيشعرون بالخزي مني	0	1	2	3
9) نتيجة تجربتي الصادمة انكشف جزء مني يجده الآخرون مخزي	0	1	2	3
10) تجربتي الصادمة أظهرت جزء مني يشعرني بالخزي	0	1	2	3
11) نتيجة تجربتي الصادمة لا أحب نفسي	0	1	2	3
12) أشعر بالخزي كثيرا لدرجة أني أريد أن أصبح غير مرئيا للآخرين أحيانا	0	1	2	3

INVALIDATION SCALE

The following questions assess your feelings towards the displacement, asylum seeking and suffering that the Syrian people have experienced.

	Strongly Disagree	Disagree	Neutral	Agree	Strong Agree
1.I feel that the world community are unable to understand the magnitude of the loss and suffering of the Syrian people	0	1	2	3	4
2. I feel that the world community blame us for what happened to us	0	1	2	3	4
3. I feel that the world community have let us down	0	1	2	3	4
4. I feel that our suffering has become forgotten	0	1	2	3	4
5. I feel that the world community deny us our right to anger	0	1	2	3	4
6. I feel that the world community deny how difficult our situation is	0	1	2	3	4

الاسئلة التالية تدور حول شعورك تجاه التهجير، و اللجوء، والمعاناة التي تعرض لها الشعب السوري.

أوافق بشدة	أوافق	حيادي	أعارض	أعارض بشدة	
4	3	2	1	0	1. أشعر أن المجتمع الدولي غير قادر على استيعاب حجم معاناة وخسارة الشعب السوري
4	3	2	1	0	2.أشعر أن المجتمع الدولي يلوموننا على ما حصل لنا
4	3	2	1	0	3. أشعر بخذلان المجتمع الدولي لنا
4	3	2	1	0	4. أشعر أن معاناتنا أصبحت منسية
4	3	2	1	0	5. أشعر أنالمجتمع الدولي ينكر علينا حقنا بالغضب
4	3	2	1	0	6. أشعر أن المجتمع الدولي ينكر مدى صعوبة وضعنا الحالي

INJUSTICE EXPERIENCES QUESTIONNAIRE

When injuries happen, they can have profound effects on our lives. This scale was designed to assess how your injury has affected your life. Listed below are 12 statements describing different thoughts and feelings that you may experience when you

think about your injury. Using the following scale, please indicate the degree to which you have these thoughts and feelings when you think about your injury.

1) I am suffering because of someone else's actions

0 1 2 3 4
Not at all All the time

2) It all seems so unfair

0 1 2 3 4
Not at all All the time

3) Nothing will ever make up for what I have gone through

0 1 2 3 4
Not at all All the time

4) I feel as if I have been robbed of something very precious

0 1 2 3 4
Not at all All the time

5) I am troubled by fears that I may never achieve my dreams

0 1 2 3 4
Not at all All the time

6) 6) I can't believe this has happened to me

0 1 2 3 4
Not at all All the time

7) Most people don't understand how severe my condition is

0 1 2 3 4
Not at all All the time

8) My life will never be the same

0 1 2 3 4
Not at all All the time

9) No one should have to live this way

0 1 2 3 4
Not at all All the time

10) I just want my life back

0 1 2 3 4
Not at all All the time

11) I feel that this has affected me in a permanent way

0 1 2 3 4
Not at all All the time

12) I worry that my condition is not being taken seriously

0 1 2 3 4
Not at all All the time

Injustice Experiences Questionnaire

إصابتنا بمصيبة أو مكروه قد تترك أثراً عميقاً على حياتنا. هذا المقياس صمم لتقييم أثر ما أصابك على حياتك. يوجد في الأسفل 12 عبارة تصف أفكار ومشاعر مختلفة ربما تمر بها عندما تفكر بما أصابك. رجاءً أشر إلى الدرجة التي تحدث بها هذه المشاعر والأفكار عندما تفكر بما أصابك باستخدام الأرقام في الأسفل.

1) أنا أعاني نتيجة أعمال أشخاص آخرين

0 1 2 3 4
أبداً دائماً

2) كل ما حصل لي يبدو غير عادل

0 1 2 3 4
أبداً دائماً

3) لا شيء سيعوض ما مررت به

0	1	2	3	4
أبداً				دائماً

4) أشعر وكأنما شيء ثمين سلب مني

0	1	2	3	4
أبداً				دائماً

5) أخشى أني لن أحقق اي من أحلامي

0	1	2	3	4
أبداً				دائماً

6) لا أصدق أن هذا حصل لي

0	1	2	3	4
أبداً				دائماً

7) معظم الناس لا يدركون مدى سوء وضعي

0	1	2	3	4
أبداً				دائماً

8) حياتي لن تعود أبداً كما كانت

0	1	2	3	4
أبداً				دائماً

9) لا ينبغي لأحد أن يعيش هكذا

0	1	2	3	4
أبداً				دائماً

10) كل ما أريده هو أن تعود حياتي لي

0	1	2	3	4

أبداً دائماً

11) أشعر ان ما حصل أثّر عليي بشكل دائم

0 1 2 3 4

أبداً دائماً

12) أخشى أن وضعي لا يؤخذ جدياً

0 1 2 3 4

أبداً دائماً

SENSE OF COHERENCE

Circle the number on each scale which most closely describes yourself
1. Do you have the feeling that you don't really care about what goes on around you?

1 2 3 4 5 6 7
Very seldom Very often
or never

2. Has it happened in the past that you were surprised by the behavior of people whom you
thought you knew well?

1 2 3 4 5 6 7
Never happened Always happened

3. Has it happened that people whom you counted on disappointed you?

1 2 3 4 5 6 7
Never happened Always happened

4. Until now your life has had:

1 2 3 4 5 6 7
No clear goals Very clear goals
or purpose at all and purpose

5. Do you have the feeling that you're being treated unfairly?

1 2 3 4 5 6 7
Very often Very seldom or
Never

6. Do you have the feeling that you are in an unfamiliar situation and don't know what to
do?

1 2 3 4 5 6 7
Very often Very seldom or
Never

7. Doing the things you do every day is:

1 2 3 4 5 6 7
A source of deep A source of pain
pleasure and satisfaction pain and boredom

8. Do you have very mixed-up feelings and ideas?

1 2 3 4 5 6 7
Very often Very seldom or
Never

9. Does it happen that you have feelings inside you would rather not feel?

1 2 3 4 5 6 7
Very often Very seldom or
Never

10. Many people – even those with a strong character – sometimes feel like sad sacks (losers) in certain situations. How often have you felt this way in the past?

1 2 3 4 5 6 7
Never Very often

11. When something happened, have you generally found that:

1 2 3 4 5 6 7
You overestimated You saw things in
or underestimated the right proportion
its importance

12. How often do you have the feeling that there's little meaning in the things you do in your
daily life?

1 2 3 4 5 6 7
Very often Very seldom or
Never

13. How often do you have feelings that you're not sure you can keep under control?

1 2 3 4 5 6 7
Very often Very seldom or
never

Sense of Coherence

ضع دائرة حول الرقم الذي يصفك على أفضل وجه:

1) هل تشعر أنك لا تهتم كثيراً بما يجري من حولك؟

1	2	3	4	5	6	7
نادراً أو أبداً						غالباً

2) هل حصل في الماضي ان تفاجأت بسلوك أناس ظننت أنك عرفتهم جيدا؟

1	2	3	4	5	6	7
نادراً أو أبداً						غالباً

3) هل حصل أن أشخاصا اعتمدت عليهم خيبوا أملك أو خذلوك؟

1	2	3	4	5	6	7
نادراً أو أبداً						غالباً

4) حتى الآن حياتك كان لها:

1	2	3	4	5	6	7
لا هدف أو غاية واضحة						أهداف وغايات واضحة

5) هل تشعر أنك تعامل بشكل غير عادل؟

1	2	3	4	5	6	7
نادراً أو أبداً						غالباً

6) هل تشعر أنك في موقف غير مألوف ولا تعرف كيف تتصرف؟

1 2 3 4 5 6 7
نادراً أو أبداً غالباً

7) القيام بالأعمال التي تقوم بها يوميا هو:

7 6 5 4 3 2 1
مصدر لرضى مصدر لألم وملل عميقين
و بهجة عميقين

8) هل لديك مشاعر وأفكار مختلطة وملتبسة؟

1 2 3 4 5 6 7
نادراً أو أبداً غالباً

9) هل يصادفك أنك تشعر بمشاعر داخلك تفضل ألا تشعر بها؟

1 2 3 4 5 6 7
نادراً أو أبداً غالباً

10) العديد من الناس – حتى أولئك ذوي الشخصيات القوية – يشعرون بالفشل في بعض المواقف، إلى أي مدى شعرت هكذا في الماضي؟

1 2 3 4 5 6 7
نادراً أو أبداً غالباً

11) عند حدوث شيء معك، بشكل عام هل وجدت أنك:

1 2 3 4 5 6 7

اسأت تقدير أهميته	قدرت الشيء بالشكل الصحيح

12) إلى أي مدى تشعر أن هناك القليل من المعنى في الاشياء التي تفعلها في حياتك اليومية؟

1	2	3	4	5	6	7
نادراً أو أبداً						غالباً

13) إلى أي مدى تشعر أنك لست متأكدا من مقدرتك على ابقاء نفسك و أمورك تحت السيطرة؟

1	2	3	4	5	6	7
نادراً أو أبداً						غالباً

DEMOGRAPHICS

Gender:____

Age:____

Marital status:______________________________________

Level of education:___________________________________

Number of years in Lebanon:_____________________________

الجنس (ذكر أو أنثى):_________________________________

السن:____

الحالة الاجتماعية: ___________________________________

المستوى التعليمي (ابتدائي، إعدادي، ثانوي، جامعة، الخ):_______________

عدد السنوات في لبنان:_______________________________

APPENDIX D: FLYER

Opportunity to participate in a research study:

We would like to invite you to participate in a study on posttramatic stress symptoms among Syrian refugees in Bekaa

You are eligible for the study if you are:

1) A Syrian refugee over 18 years of age
2) You have witnessed or experienced violent events during the Syrian war

This study aims to assess and understand depression and posttraumatic stress symptoms and their predictors that Syrian refugees face.

What will you be asked to do:

- Fill out a questionnaire about your mental health symptoms and stressors.
- Completion of the study is expected to take no longer than an hour of your time

If you are interested in participating in the study, please the research assistant Leila Talhouk at 03476216.

For questions or more information, please contact the principal investigator at the American University of Beirut, Dr. Alaa Hijazi at 01350000 extension 4370

To ensure your privacy and confidentiality, you will fill the questionnaires at a private room in the primary healthcare clinic or in a private tent, where only you and the research assistant will be present.

All participants will receive 10,000 Lebanese Liras as a Thank You gift for participating in the study in addition to complete coverage of transportation fees.

فرصة للمشاركة في مشروع بحثي

نود دعوتكم للمشاركة في دراسة بحثية عن أعراض الضغط النفسي و الاكتئاب عند اللاجئين السوريين

قد تكون مؤهلا للدراسة إذا كنت:

1) لاجئاً سورياً عمرك فوق 18 سنة

2) شاهدت أو تعرضت لاحداث العنف في الحرب السورية

ما الذي سيطلب منك؟

- أن تملأ استبيان يحتوي على أسئلة عن صحتك النفسية والضغوط النفسية التي تواجهها
- لن تستغرق الدراسة أكثر من ساعة من وقتك

تهدف هذه الدراسة إلى تقييم وفهم عوارض الضغط النفسي التي يواجها اللاجئين السوريين والعوامل المتعلقة بها

اذا كنت مهتما و تود المشاركة بالبحث، يرجى التواصل مع مساعدة البحث ليلى تلحوق على الرقم التالي: 03476216.

للأسئلة أو للحصول على المزيد من المعلومات، يرجى التواصل مع الباحثة الرئيسية في الجامعة الاميركية في بيروت، الدكتورة آلاء حجازي على الرقم التالي: 01350000 الرقم الداخلي 4370

للحفاظ على خصوصيتك، ملأ الاستبيان سوف يتم في غرفة عيادة أو بخيمة خاصة بوجودك انت ومساعدة البحث فقط

جميع المشاركين سيتسلمون هدية بقيمة 10000 ليرة لبنانية لشكرهم على مشاركتهم في الدراسة بالإضافة الى تغطية تكاليف النقل كاملة

APPENDIX E: HANDOUT FOR MENTAL HEALTH REFERRALS

Medecins du Monde (mental health)

- Aamel Association in Kamed el-Loz 08-663086
- Islamic Welfare Society in Qab Elias 08-500688
- Social Development Center in Hosh el-Omara, Zahleh 08-815100

Walk in and ask for the nurse or the receptionist who will refer you to the person relevant to the service you require.

أطباء العالم (الصحة النفسية)

مؤسسة عامل في كامد اللوز 08-663086

جمعية الخيرية الاسلامية في قب الياس 08-500688

مركز الخدمات الانمائية في حوش الأمراء زحلة 08-815100

عند دخولك المستوصف، قم بالتوجّه عند الممرضة او جهة الاستقبال وهي تقوم باحالتك للشخص المتخصص بالخدمة المطلوبة.

APPENDIX F: FREQUENCY OF TYPES OF TRAUMAS

	Frequency N* (%)
1. Oppressed because of ethnicity, religion, or sect	29 (18.4)
2. Present while someone searched for people or things in your home.	71 (44.9)
3. Searched arbitrarily	45 (28.5)
4. Property looted, confiscated, or destroyed	120 (75.9)
5. Forced to leave your hometown and settle in a different part of the country with minimal services	133 (84.2)
6. Imprisoned arbitrarily	12 (7.6)
7. Suffered ill health without access to medical care or medicine	95 (60.1)
8. Suffered from lack of food or clean water	109 (69.0)
9. Forced to flee your country	152 (96.2)
10. Expelled from country based on ancestral origin, religion, or sect	64 (40.5)
11. Lacked shelter	101 (63.9)
12. Witnessed the desecration or destruction of religious shrines or places of religious instruction	85 (53.8)
13. Witnessed the arrest, torture, or execution of religious leaders or important members of tribe	58 (36.7)
14. Witnessed mass execution of civilians	32 (20.3)
15. Witnessed shelling, burning, or razing of residential areas or marshlands	134 (84.8)
16. Witnessed chemical attacks on residential areas or marshlands	38 (24.1)
17. Exposed to combat situation (explosions, artillery fire, shelling) or landmine.	129 (81.6)
18. Serious physical injury from combat situation or landmine	16 (10.1)
19. Used as a human shield	14 (8.9)
20. Serious physical injury of family member or friend from combat situation or landmine	94 (59.5)
21. Witnessed rotting corpses	51 (32.3)
22. Confined to home because of chaos and violence outside	97 (61.4)
23. Witnessed someone being physically harmed (beating, knifing, etc.)	51 (32.3)
24. Witnessed sexual abuse or rape	14 (8.9)
25. Witnessed torture	32 (20.3)

26. Witnessed murder	58 (36.7)
27. Forced to inform on someone placing them at risk of injury or death	8 (5.1)
28. Forced to destroy someone’s property	6 (3.8)
29. Forced to physically harm someone (beating, knifing, etc.)	4 (2.5)
30. Murder or violent death of family member (child, spouse, etc.) or friend	98 (62.0)
31. Forced to pay for bullet used to kill family member	6 (3.8)
32. Received the body of a family member and prohibited from mourning them and performing burial rites	35 (22.2)
33. Disappearance of family member (child, spouse, etc.) or friend	92 (58.2)
34. Disappearance or kidnapping of a family member or a friend	65 (41.1)
35. family member (child, spouse, etc.) or friend taken as a hostage	48 (30.4)
36. Someone informed on you placing you and your family at risk of injury or death.	12 (7.6)
37. Physically harmed (beaten, knifed, etc.)	11 (7.0)
38. Kidnapped	3 (1.9)
39. Taken as a hostage	4 (2.5)
40. Sexually abused or raped	1 (0.6)
41. Tortured (i.e., while in captivity you received deliberate and systematic infliction of physical and/or mental suffering)	8 (5.1)
42. Please specify any other situation that was very frightening or in which you felt your life was in danger:	29 (18.4)

*N = 157

APPENDIX G: FIGURES

Figure 1

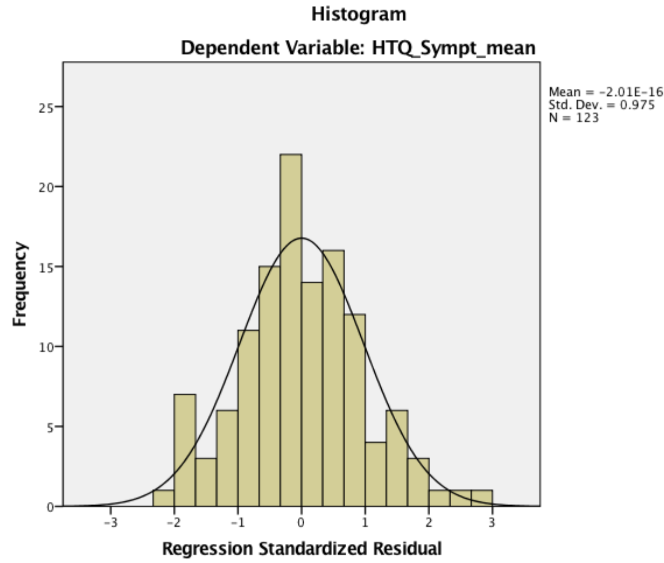
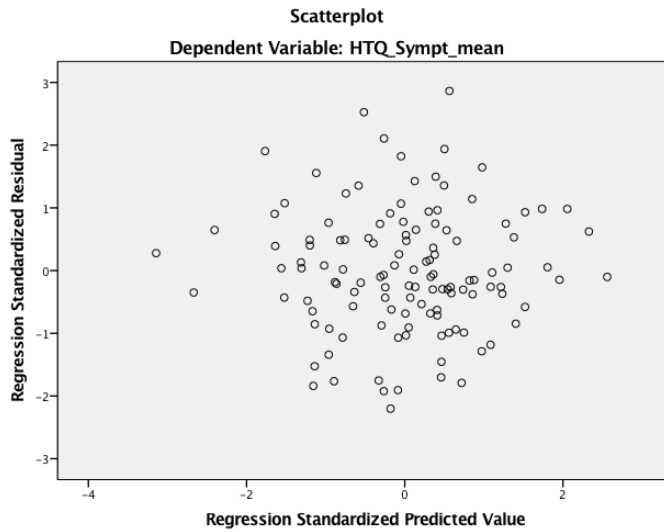


Figure 2



APPENDIX H: INDEX CARDS

Invalidation

أوافق بشدة	أوافق	حيادي	أعارض	أعارض بشدة
4	3	2	1	0

Perceived injustice

دائماً				ابداً
4	3	2	1	0

SOC

غالباً						نادراً او ابداً
7	6	5	4	3	2	1

SOC

اهداف وغايات واضحة						لا هدف أو غاية واضحة
7	6	5	4	3	2	1

SOC

مصدر لألم وملل عميقين						مصدر لرضى وبهجة عميقين
7	6	5	4	3	2	1

SOC

اسأت تقدير اهميته						قدرت الشيء بالشكل الصحيح
1	2	3	4	5	6	7

Shame

في ٧ ايام الماضية

لا ينطبق علي إطلاقاً	ينطبق علي بعض الأحيان	ينبطق علي غالباً	ينطبق علي دائماً
0	1	2	3

PTSD

نعم	لا

PTSD

في ٧ ايام الماضية

لا أبداً	قليلاً	إلى حدٍ ما	بشدة
1	2	3	4