Georgia State University ScholarWorks @ Georgia State University

Counseling and Psychological Services Dissertations

Department of Counseling and Psychological Services

12-20-2012

'Means of Survival' as Moderator of the Relationship between Cumulative Torture Experiences and Posttraumatic Stress Disorder among Refugees

Lydia Odenat Georgia State University

Follow this and additional works at: http://scholarworks.gsu.edu/cps diss

Recommended Citation

Odenat, Lydia, "'Means of Survival' as Moderator of the Relationship between Cumulative Torture Experiences and Posttraumatic Stress Disorder among Refugees." Dissertation, Georgia State University, 2012. http://scholarworks.gsu.edu/cps_diss/85

This Dissertation is brought to you for free and open access by the Department of Counseling and Psychological Services at ScholarWorks @ Georgia State University. It has been accepted for inclusion in Counseling and Psychological Services Dissertations by an authorized administrator of ScholarWorks @ Georgia State University. For more information, please contact scholarworks@gsu.edu.

ACCEPTANCE

This dissertation, 'MEANS OF SURVIVAL' AS MODERATOR OF THE RELATIONSHIP BETWEEN CUMULATIVE TORTURE EXPERIENCES AND POSTTRAUMATIC STRESS DISORDER AMONG REFUGEES, by LYDIA ODENAT, was prepared under the direction of the candidate's Dissertation Advisory Committee. It is accepted by the committee members in partial fulfillment of the requirements for the degree Doctor of Philosophy in the College of Education, Georgia State University.

The Dissertation Advisory Committee and the student's Department Chair, as representatives of the faculty, certify that this dissertation has met all standards of excellence and scholarship as determined by the faculty. The Dean of the College of Education concurs.

Jeffrey Ashby, Ph.D.	Gregory Brack, Ph.D.
Committee Chair	Committee Member
Joel Meyers, Ph.D.	Ibrahim Kira, Ph.D.
Committee Member	Committee Member
Don E. Davis, Ph.D.	
Committee Member	
Date	
Brian Dew, Ph.D.	
Chair, Department of Counseling a	nd Psychological Services
Paul A. Alberto, Ph.D.	
Interim Dean	
College of Education	

AUTHOR'S STATEMENT

By preparing this dissertation as a partial fulfillment of the requirements for the advanced degree from Georgia State University, I agree that the library of Georgia State University shall make it available for inspection and circulation in accordance with its regulations governing materials of this type. I agree that permission to quote, to copy from, or to publish this dissertation may be granted by the Professor under whose direction it was written, by the College of Education's director of graduate studies and research, or by me. Such quoting, copying, or publishing must be solely for scholarly purposes and will not involve potential financial gain. It is understood that any copying from or publication of this dissertation which involves potential financial gain will not be allowed without my written permission.

Lydia Odenat	

NOTICE TO BORROWERS

All dissertations deposited in the Georgia State University library must be used in accordance with the stipulations prescribed by the author in the preceding statement. The author of this dissertation is:

Lydia Odenat 2465 Main Street, #307 East Point, GA 30344

The director of this dissertation is:

Dr. Jeffrey Ashby
Department of Counseling and Psychological Services
College of Education
Georgia State University
Atlanta, GA 30303

CURRICULUM VITAE

Lydia Odenat P.O. Box 90132 Atlanta, GA 30310

\mathbf{E}	DI	[]	CA	Δ 7	ΓI	\mathbf{O}	N	•

PhD	2012	Georgia State University
		Counseling Psychology, Health Psychology concentration
MPH	2005	Emory University
		Behavioral Sciences & Health Education
BS	2001	Florida State University
		Psychology, Neuroscience minor

PROFESSIONAL EXPERIENCE:

LESSIONAL EV	PERIENCE:
2011-2012	Research Manager/Research Project Coordinator
	Emory University School of Medicine/Emergency Medicine, Atlanta, GA
2010-2011	Evaluator/Research Project Coordinator – Text4Baby Pilot Evaluation
	Emory University Rollins School of Public Health/Epi, Atlanta, GA
2009-2010	Pre-doctoral Psychology Intern
	South Florida State Hospital, Pembroke Pines, FL
2007-2009	Grants Pre-awards Administrator
	Georgia State University College of Education, Atlanta, GA
2006-2008	Research Assistant - Center for School Safety, Climate & Classroom Mgmt
	Georgia State University College of Education, Atlanta, GA
2006-2007	Data Abstractor – Georgia Violent Death Reporting System (GVDRS)
	Georgia DHR, Division of Public Health, Atlanta, GA
2006-2007	Research Project Coordinator – Effects of Prenatal Cocaine Exposure Study
	Emory School of Medicine/Child Psychiatry, Atlanta, GA
2003-2005	Senior Research Project Coordinator – Pediatric Asthma Study
	Emory School of Medicine/Child Psychiatry, Atlanta, GA
2004	HIV Health Educator – HIV & STD Prevention Program
	Emory University Rollins School of Public Health/BSHE, Atlanta, GA
2001-2002	Research Interviewer - Hepatitis C, Cervical Neoplasia & HPV Study
	Emory School of Medicine/Obstetrics & Gynecology, Atlanta, GA

PROFESSIONAL SOCIETIES & ORGANIZATIONS

2011-2012	Jung Society of Atlanta
2007-2008	American Psychological Association
2007-2008	Association of Black Psychologists

PUBLICATIONS

- Kira, I., Abou-Mediene, S., Ashby, J., **Odenat, L**, Mohanesh, J., & Alamia, H. (in press). The dynamics of post-traumatic growth across different trauma types in a Palestinian sample. *Journal of Loss and Trauma: International Perspectives on Stress and Coping*.
- Kira, I., Templin, T., Lewandowski, L., Ashby, J. S., Oladele, A., & **Odenat, L**. (2012). Cumulative Trauma Disorder Scale: Two Studies. *Psychology*, *3*(9), *643-656*.
- Kira, I., Abou-Mediene, S., Ashby, J., Lewandowski, L., Mohanesh, J., & **Odenat, L.** (2012). Post traumatic Growth Inventory: Psychometric properties of the Arabic version in Palestinian adults. *International Journal of Educational and Psychological Assessment*, 11, pp. 120-137.

- Kira, I., Ashby, J., Lewandowski, L., Smith, I., & **Odenat, L.** (2012). Gender inequality and its effects on female torture survivors. *Psychology*, *3*(4), pp.352-363.
- Crosby, R., Bonney, E., **Odenat, L.** (2005). Correlates of perceived difficulty in potentially disclosing HIV-positive test results: A study of low-income women attending an urban clinic. *Sexual Health*, 2, pp.103-107.
- Bonney, E., Crosby, R., **Odenat, L.** (2004). Repeat HIV testing among low-income minority women: A descriptive analysis of factors influencing decisional balance. *Ethnicity & Disease*, *14*, pp.330-335.
- Adusumalli, Jasvant MD; Bonney, Elizabeth MD; **Odenat, Lydia**; Jamieson, Denise MD, (2004). Hepatitis C Virus: Prevalence in a gynecologic urgent care clinic population. *Infectious Diseases in Obstetrics & Gynecology, 12*, pp.9-12.
- Crosby, Richard PhD; Bonney, Elizabeth MD; **Odenat, Lydia**, (2004). Correlates of intent for repeat HIV testing: A study of low-income women attending an urgent care clinic in the urban south. *Public Health Nursing Manuscript*, 21(5), pp.419-424.

PRESENTATIONS

- Kira, I., Abou-Mediene, S., Ashby, J., **Odenat, L**, Mohanesh, J., & Alamia, H. (2012). *The dynamics of post-traumatic growth across different trauma types in a Palestinian sample*. Paper accepted for presentation at the annual meeting of the American Psychological Association, Orlando, FL.
- Hill, M.B., Brack, G. **Odenat**, L. & Blood, R.A.C. (2009). *Introducing new leaders to the complex interplay of intraunit conflict*. Poster presented at the annual meeting of the American Psychological Association, Toronto, Canada.
- Hill, M.B., Brack, G. **Odenat**, L. & Blood, R.A.C. (2009). *When reality bites back: Chaos/complexity theory for advocate leaders*. Poster presented at the annual meeting of the American Psychological Association, Toronto, Canada.
- **Odenat, L.**, Kordansky, J., & Heath-Gainer, W. (2008). *Resilience & hope among asylum-seeking refugees and survivors of genocide and war*. Poster presented at the annual meeting of the International Counseling Psychology Conference, Chicago, IL.
- Gardner, N., **Odenat, L.**, Ruffin, S., Atkins, T., Megumi, O., & Davis, T. (2008). *Exposure to idyllic beauty characteristics: Effect on international student's self-esteem*. Poster presented at the annual meeting of the International Counseling Psychology Conference, Chicago, IL.
- **Odenat, L.,** White, N., Ruffner, C., Marshall, M., Chambless, C., Meyers, J. PhD, & Ashby, J. PhD. (2007). *Perceptions of harmfulness, drug prevention education, & adolescent drug use*. Poster presented at the annual meeting of the American Psychological Association, San Francisco, CA.
- Chambless, C., Meyers, J. PhD, White, N., Ruffner, C., Marshall, M., **Odenat, L.,** Ashby, J. PhD. (2007). *Influence of adult and peer approval of alcohol and drugs on adolescent usage*. Poster presented at the annual meeting of the American Psychological Association, San Francisco, CA.
- Trotter, R., Ganske, K., Ashby, J. PhD, Matheny, K. PhD, Timmons, D. PhD, **Odenat, L**. (2007). *Big five personality traits, coping resources, and depression*. Poster presented at the annual meeting of the American Psychological Association, San Francisco, CA.
- **Odenat, L.,** Nwosu, A., Celano, M. PhD, Cummings, L. (2004). *Caregiver depression and medication adherence among low-income children with asthma*. Poster presented at the annual meeting of the American Public Health Association, Washington, DC.

GOVERNMENT REPORT

Chambless, C., Marshall, M., **Odenat, L**., Ruffner, C., White, N., Ashby, & Meyers, J. (2006). Georgia Student Health Survey II State Report. In Center for School Safety, School Climate & Classroom Management (Vol. 1, pp. 1-23).

ABSTRACT

'MEANS OF SURVIVAL' AS MODERATOR OF THE RELATIONSHIP BETWEEN CUMULATIVE TORTURE EXPERIENCES AND POSTTRAUMATIC STRESS DISORDER AMONG REFUGEES

by Lydia Odenat

Refugee torture survivors often present with a myriad of psychological challenges, such as posttraumatic stress and depression, stemming from their exposure to torture and other pre- and post-settlement experiences (Gong-Guy and colleagues, 1991). The present study examined the moderating effect of four coping processes (i.e., family support, religious beliefs, political beliefs, and will to survive) on the relationship between cumulative torture and posttraumatic stress disorder (PTSD) among a sample of 204 (N=204) adult refugee torture survivors. Subjects completed a demographic questionnaire, the Torture Severity Scale (TSS; Kira, Lewandowski, Templin, Ramaswamy, Ozkan, Hammad, & Mohanesh, 2006), the Clinician Administered PTSD Scale (CAPS-2; Weathers, Keane, & Davidson, 2001), and the Means of Survival Scale (MOS; Kira, 2012). Twenty-three percent (N = 74) of the sample endorsed clinically significant levels of PTSD. Torture and PTSD were positively associated, indicating that greater exposure to cumulative torture is associated with greater trauma symptoms (r[2] =.18, p<.01). Significant positive correlations were found between will to survive and cumulative torture (r[2] = .31, p<.01), PTSD and political beliefs (r[2] = .13, p<.05), PTSD and will to survive (r[2] = .141, p<.05), religious beliefs and will to survive (r[2] = .141), religious beliefs and will to survive (r[2] = .141). .15, p<.01), and family support and will to survive (r[2] = .130, p<.05). Results of the regression analyses demonstrated that CTE (b=.12, p=.035) and political beliefs (b=.17, p=.002) were significant predictors of PTSD symptoms in this sample, $R^2 = .039$; F

(2,323) = 7.55, p=.001. None of the interaction terms examined accounted for significant variation in PTSD symptoms. Study findings will help counseling psychologists devise the most appropriate treatment plans and strategies to treat posttraumatic stress reactions among refugee torture survivors, as well as inform future interventions developed for this vulnerable population.

'MEANS OF SURVIVAL' AS MODERATOR OF THE RELATIONSHIP BETWEEN CUMULATIVE TORTURE EXPERIENCES AND POSTTRAUMATIC STRESS DISORDER AMONG REFUGEES

by Lydia Odenat

A Dissertation

Presented in Partial Fulfillment of Requirements for the
Degree of
Doctor of Philosophy
in
Counseling Psychology
in
the Department of Counseling and Psychological Services
in
the College of Education

Georgia State University

ACKNOWLEDGMENTS

This dissertation would not have been possible without the loving support of my mother and father, Arlette and Louinaud Odenat (1940-2010); the encouragement of my siblings Armelle, Lindson, Lino, and Jean; the inspiration of my husband Jesse; the adoration of my daughter Anaise; the groundwork laid by my ancestors Antelia, Mustafa, Anelia, Merite, Princile, and Gaston; the guidance of my dissertation committee; and the motivation of the friends, mentors, and colleagues who helped me get to the finish line.

TABLE OF CONTENTS

	Pa	ige
	List of Tables	iv
	List of Figures	V
	Abbreviations	vi
Chapte	er	
1	BEYOND PTSD: APPLYING DESNOS TO THE EXPERIENCES OF REFUGEE SURVIVORS OF TORTURE	1
	References	20
2	'MEANS OF SURVIVAL' AS MODERATOR OF THE RELATIONSHIP BETWEEN CUMULATIVE TORTURE EXPERIENCES AND POSTTRAUMATIC STRESS DISORDER AMONG REFUGEES	
	Introduction	.35
	Method	41
	Results	47
	Discussion	.52
	References	.57
Appen	ndixes	64

LIST OF TABLES

Table		Page
1	Participant Demographic Characteristics	48
2	Torture Types Reported	49
3	Correlations between IV, DV, and Moderators	51

LIST OF FIGURES

Figure		Page
1	Family Support as Moderator	46
	Political Beliefs as Moderator	
3	Religious Beliefs as Moderator	46
4	Will to Survive as Moderator	47

ABBREVIATIONS

CTE Cumulative Torture Exposure

DESNOS

Disorders of Extreme Stress Not Otherwise Specified
Diagnostic and Statistical Manual of Mental Disorders – 4th edition DSM-IV

Means of Support MOS

PTSD Posttraumatic Stress Disorder

CHAPTER 1

BEYOND PTSD: APPLYING DESNOS TO THE EXPERIENCES OF REFUGEE SURVIVORS OF TORTURE

The use of torture remains a global public health problem among refugees and has been shown to have long-standing impact on individuals, their families, and communities (Grodin et al., 2008). Evidence suggests that between 5% and 35% of refugees who present in camps and treatment centers around the world are reportedly victims of torture (Jaranson, Butcher, Halcon, Johnson, Robinson, Savik, Spring, & Westermeyer, 2004), with even higher estimates up to 50% among certain ethnic groups (Grodin, Piwowarczyk, Fulker, Bazazi, & Saper, 2008; Jaranson et al., 2004). With roughly 400,000 to 500,000 refugee survivors of torture residing in the United States alone (Gorman, 2001; Newall, 2007), counselors are increasingly likely to encounter this vulnerable population in a variety of treatment settings, ranging from schools to government agencies (Marotta, 2003). Despite these harrowing numbers, mental health and other care providers continue to be inadequately trained to meet the medical and mental health needs of this population (Lears & Abbott, 2005)

Refugee torture survivors often present with a myriad of psychological and physical consequences of torture, displacement, indiscriminate violence, and deprivation (Gong-Guy, Cravens, & Patterson, 1991; Lears & Abbott, 2005; Tamblyn, 2011). Studies have shown high rates of psychoses (Kroll, Yusuf, & Fujiwara, 2011), somatic complaints and chronic pain (Goldfeld et al., 1988; Punamaki, Qouta, & El Sarraj, 2010), substance abuse (Holmqvist, Anderson, Anjum & Alinder, 2006), depression (Ellis, MacDonald, Lincoln, & Cabral, 2008), anxiety symptoms (Sachs, Rosenfeld, Llewa,

Rasmussen, & Keller, 2008), dissociative disorders (Thapa, Ommeren, Sharma, de Jong, Hauff, 2003), and impaired memory (Gorman, 2001) in this population. A significant number of refugees continue to develop symptoms of posttraumatic stress, depression, anxiety, sleep disturbance, and somatic complaints even years after exposure to torture (Grodin, et al., 2008; Hargreaves, 2002; Holmqvist et al., 2006; Jaranson et al., 2004; Lindencrona, Ekblad, & Hauff, 2008; Olsen, Montgomery, Bojholm, & Foldspang, 2007). It is well documented in the research literature that torture exposure not only has significant impact on a refugees' psychosocial functioning, but has deleterious effects on their capacity to resettle and integrate into a new society (Grodin et al., 2008). These traumatic experiences bear a major burden on the lives of refugees and carry an enormous cost to society when left unaddressed.

Posttraumatic stress disorder (PTSD) is a chronic condition that involves the reexperiencing of traumatic events, heightened arousal, avoidant behaviors and emotional numbing that inhibit normal functioning (Jaranson et al., 2004; Ford, Stockton, Kaltman, & Green, 2006). Among refugee torture survivors, it is estimated that roughly 16-37% develop a lifetime diagnosis of PTSD (de Jong, Komproe, & Ommeren, 2001). Other researchers have found prevalence rates as low as 4% to as high as 86% in other samples (Jaranson et al., 2004; Lueger-Schuster, 2010). Clinical reports of sufferers have shown that they present with a wide range of traumatic stress reactions, including impairments in self-regulation, chronic depression, anxiety, somatic complaints, feelings of fear, demoralization, rage, and loss of control (Basoglu, 2006). Common clinical presentations include poor coping strategies, impaired self-perception, survivor's guilt, shame, distrust of others, and loss of hope (Chung, 2001, Gorman, 2001; Regel & Berliner, 2007).

Substance abuse, self-injury, fugue, ego fragmentation, re-victimization, impairments in identity and personality, and impulsivity are also frequently observed among chronically traumatized refugees (Berliner et al., 2004; Cook, Blaustein, Spinnazola, & van der Kolk, 2003). These symptoms typically interfere with their day-to-day functioning and when left untreated, often persist throughout their lifetime (Lears & Abbott, 2005).

The aim of the present article is to illustrate that PTSD, as a culture-bound diagnostic model, does not fully address the unique trauma responses of refugee torture survivors. The broad variability in the PTSD rates among this population is indicative of the difficulties involved in framing their distress symptoms within the context of PTSD. The authors offer up Disorders of Extreme Stress Not Otherwise Specified (DESNOS) (Herman, 1996) as a viable framework to conceptualize the experiences of refugees following exposure to torture. DESNOS is an alternative model that addresses the pervasive disturbances in perception, affect regulation, personality development, and impulse control that often occur in response to severe and prolonged traumatization among survivors of torture (Liebenberg & Papaikonomou, 2010; Luxenberg, Spinazzola, & van der Kolk, 2001).

Clinicians working with refugee victims of torture have found that the PTSD diagnosis, as it currently stands, does not adequately account for the diversity of symptoms experienced by traumatized refugee torture survivors (Berliner, Mikkelsen, Bovbjerg, & Wiking, 2004). Above and beyond symptoms of re-experiencing, avoidance, and hyperarousal, researchers in one study found significant impairments in systems of meaning, interpersonal relationships, and somatization in 24-42% of a sample of war and genocide survivors. The DSM-IV's restriction of PTSD's diagnostic criteria to essential

features dismisses many of these characteristics and manifestations of responses to traumatic stress. As argued by Brett (1996), these manifestations remain important as they have clinical and treatment relevance for the chronically traumatized. According to Kira and colleagues (2006), the PTSD model "cannot account for the severity or the serious multilateral effects of torture or other cumulative or complex traumas" (p. 211).

Clinicians working with this unique population find that PTSD de-emphasizes somatic complaints, dissociative symptoms, and personality disturbances in favor of symptoms that fit neatly into its core criteria (i.e., re-experiencing, hyperarousal, and avoidance). They find that victims are often difficult to identify due to high levels of somatization, considerable comorbidity, and developmental deficits associated with their posttraumatic reactions to torture (Grodin et al., 2008; Schubert & Punamaki, 2011).

These issues are confounded by refugees' fear of disclosure, feelings of shame and survivors' guilt, lack of trust for providers, and a tendency to manifest distress in ways that are incongruent with Western culture (Blaz-Kapusta, 2008; Chester & Holtan, 1992; Chung, 2001; Regel & Berliner, 2007). In light of these limitations, some are even in support of the use of a separate torture syndrome among refugee survivors, as this may establish more flexible criteria and a better diagnosis of the psychological difficulties associated with torture (Whittaker, 1988).

One of the major criticisms of PTSD's applicability to refugee populations has centered on the fact that its study was based exclusively on the post-trauma experiences of white male Westerners between 1895 and 1974 (van der Kolk, Weisaeth, & van der Hart, 1996). Its position in the psychiatric world became solidified when it was effectively used to address the severe psychiatric problems of returning Vietnam veterans

in the seventies. According to Nicholl & Thompson (2004), this diagnostic framework remains value-based, culturally-biased, and widely influenced by the historical, social, and economic factors that were in play during that era. It is increasingly regarded as a system that lends itself to treatment exclusively focused on specific symptom reduction and response severity (Nicholl & Thompson, 2004). Despite its many successes in the diagnosis and treatment of traumatized individuals, it does not fully account for the range of symptoms experienced by non-Westerners and people of color. As argued by Lears & Abbotts (2005), PTSD symptoms among refugees differ according to their culture, and their symptoms often take the form of somatic complaints that are culturally determined. Several investigators (e.g. Summerfeld, 1999; Watters, 2001) note that PTSD's essential flaw is its biomedical approach to psychopathology that is based on Cartesian dualism, which makes it nothing more than a "socio-political pseudocondition" that reframes suffering into a technical problem to which short-term technical solutions (e.g., counseling, medication) can be applied (p. 1061).

Factor analytic studies on PTSD have shown that PTSD's three-factor model (i.e., avoidance, re-experiencing, and arousal) can look quite different when applied to varying groups of traumatized refugees and non-Westerners (Rasmussen, Smith, & Keller, 2007; Vincent and Chang, 2012). Among the many problems cited is the inclusion of avoidance and numbing on the same domain (Criterion C), which appears to manifest itself differently among certain ethnic groups (Rasmussen et al., 2007). In one particular sample of African refugees exposed to political violence, investigators found that symptoms of intrusion and hyperarousal were nearly indistinguishable. Moreover, research suggests that PTSD places great emphasis on phenomenological diagnoses,

while discounting the important interplay between biological and psychological processes, and between the trauma symptoms themselves (van der Kolk and McFarlane, 1996). Ultimately, these issues make the identification and treatment of trauma symptoms more challenging for counselors, who will increasingly encounter unprecedented numbers of refugee torture survivors in their line of work (Marotta, 2003).

Disorders of Extreme Stress Not Otherwise Specified (DESNOS)

In contrast to the documented weaknesses of the PTSD, DESNOS offers a clinically relevant classification system to frame the posttraumatic stress reactions of refugee torture survivors (Herman, 1992). This framework consists of seven areas of functioning, all of which are involved in the posttraumatic stress reactions of refugees exposed to chronic trauma (Blaz-Kapusta, 2008). Termed "alterations", the degree to which these areas are impaired have been associated with a number of factors, including duration of trauma, number of exposures, age of onset, and cultural and religious background, to name a few (van der Kolk et al., 2005). The following outline summarizes the diagnostic criteria for DESNOS:

DESNOS Diagnostic Criteria

- I. Alteration in affect and impulse regulation
 - a. Required: Difficulty regulating affect.
 - b. At least one of the following required: Self-destructive behavior, suicidal preoccupation, difficulty modulating anger, or sexual risktaking behaviors.
- II. Alteration in attention and consciousness:

 a. Either of the following required: Amnesia or transient dissociative episodes/depersonalization.

III. Alteration in self-perception:

 At least two of the following required: Feelings of ineffectiveness, guilt, permanent damage, shame, minimization, or feeling misunderstood.

IV. Alteration in interpersonal relationships:

a. At least one of the following required: Inability to trust, revictimization, or victimization of others.

V. Alteration in perception of perpetrator:

a. Common features, but none of the following required: Idealization of perpetrator, preoccupation with harming perpetrator, or distorted beliefs about perpetrator.

VI. Somatization:

 At least two of the following required: Digestive problems, chronic pain, cardiopulmonary symptoms, conversion symptoms, or sexual dysfunction.

VII. Alteration in systems of meaning:

a. At least one of the following required: Despair and hopelessness,
 loss of previously-held beliefs.

Note: DESNOS diagnostic criteria. Adapted from "Disorders of extreme stress: The empirical foundation of a complex adaptation to trauma" by B.A. van der

Kolk, S, Roth, D. Pelcovitz, S. Sunday, & J. Spinnazola, 2005, *Journal of Traumatic Stress*, 18(5), p. 389-399.

Unlike PTSD, DESNOS provides consideration for the pervasive disturbances in perception, affect regulation, personality development, and impulse control that often occur in response to severe and prolonged traumatization among survivors of torture (Liebenberg & Papaikonomou, 2010; Luxenberg, Spinazzola, & van der Kolk, 2001). Most studies on DESNOS to date have applied this framework to war veterans (Ford, 1999; Jongedijk, Carlier, Shreuder, & Gersons, 1996), battered women (Blaz-Kapusta, 2008), victims of child abuse (Cloitre, Stolbach, Herman, van der Kolk, Pynoos, Wang, Petkova, 2009), low income women (Ford, 1998), sex workers (Choi, Klein, Shin, and Lee, 2009), hostages (Cantor and Price, 2007), victims of sexual abuse (Miller and Resick, 2007), and college women (Ford et al., 2006). Very little is known about the applicability of DESNOS to non-Western people of color (de Jong, Komproe, Spinazzola, van der Kolk, and Van Ommeren, 2005).

Although there is some overlap between PTSD's focus on avoidance and hyperarousal symptoms and DESNOS' focus on affect and impulse dysregulation, as it stands, the current PTSD criteria does not take into account a host of other traumatic stress symptoms commonly reported among torture survivors. For instance, PTSD is an anxiety disorder, while DESNOS criteria include broader impairment in cognitive, affective, relational, and biological self-regulation (Ford et al., 2006). Among survivors, this may manifest itself as dissociative episodes, mood disturbances, or interpersonal problems. A study conducted among Kosovar civilian war victims found that independent

of the effects of PTSD, DESNOS was significantly associated with poorer psychological functioning, satisfaction with life, and social support (Morina & Ford, 2008). The DSM-IV's restriction of the diagnostic criteria of PTSD to essential features dismisses many of these characteristics that have clinical and treatment relevance for the chronically traumatized (Brett, 1996). Though the American Psychiatric Association warns against the strict adherence to the PTSD criteria, many clinicians continue to operate as though the criteria is a complete and exact description of the disorder (APA, 1994; Brett, 1996).

Another reason that DESNOS should be used in the conceptualization of torture trauma among refugees is that its treatment differs from the treatment of PTSD among some samples. Many clinicians working with this population have reported several challenges in the implementation of therapeutic interventions (Regel & Berliner, 2007). Blaz-Kapusta (2008) argues that while PTSD psychotherapy interventions must focus on the direct psychological consequences of trauma exposure and trauma memories, DESNOS psychotherapy interventions must focus on treating the "present trauma", which includes current symptoms and their impact on various areas of current functioning. As opposed to challenging a refugee survivor to emotionally process a traumatic memory, the focus would be on strengthening their ability to regulate their emotions or resolve their interpersonal problems.

Though diagnosis may be difficult due to DESNOS' lack of core symptoms and numerous diffused ones, researchers argue that it is essential that a distinction be made between simple PTSD and DESNOS to ensure treatment is comprehensive and integrative (Jongedijk et al., 1996). Others argue that a phase-oriented sequential approach focused on alliance formation and stabilization, trauma processing, and

functioning reintegration is essential to improve prognosis (Ford, Courtois, Steele, van der Hart, & Nijenhuis, 2005).

Applicability of DESNOS to Refugee Torture Survivors

DESNOS accounts for the three broad areas of disturbances commonly found among survivors of complex traumas; namely symptomatic, characterological and vulnerability to repeated harm (Herman, 1993). DESNOS' first area of functional impairment, affect and impulse dysregulation, is characterized by poor modulation of aggression, labile affect, and extreme emotional reactions, such as rage or sadness, that are inappropriate to the situational context (Blaz-Kapusta, 2008). Studies show that refugee survivors present with significant mood disturbances characterized by pervasive sadness, mania, fear, anger, rage, emotional lability, and difficulty coping with daily emotional stressors (Chester & Holtan, 1992; Hougen, Kelstrup, Petersen, & Rasmussen, 1988). This is consistent with the research findings of DESNOS, which suggest that individuals who meet criteria for this disorder tend to be easily overwhelmed, over-react to emotional stressors, have difficulty self-soothing, and engage in self-destructive behaviors to manage distressing emotional experiences (Luxenberg, et al., 2001). Impulsivity, a hallmark of DESNOS, involves self-injurious behaviors ranging from selfmutilation and eating disorders to suicidal preoccupation (Blaz-Kapusta, 2008). One study among tortured and traumatized refugees from various countries found a high prevalence of suicidal attempts and up to 50% of subjects reported engaging in suicidal behavior (Ferrada-Noli, Asberg, Ormstad, Lundin, & Sundbom, 1998). Self-injury and suicidal preoccupation are symptoms that are adequately addressed within DESNOS but de-emphasized by PTSD.

The second area of functioning in DESNOS involves an alteration in the chronically traumatized person's attention and state of consciousness. As per Herman (1993), these alterations include experiences of amnesia, depersonalization, and transient dissociative episodes that assist in altering an unbearable reality. According to this framework, the chronically traumatized may rely more heavily on dissociative coping strategies, such as absorption/fantasy and depersonalization/derealization to manage distress. Among refugee torture survivors, dissociation remains an insufficiently recognized symptom under PTSD, but is a key feature of complex posttraumatic reactions. Chester & Holtan (1992) also note the high prevalence of memory deficits, problems with concentration, confusion, and other areas of cognitive functioning in this population. One particular study among African refugee torture victims found that a majority of subjects reported mild to moderate difficulty managing daily tasks and solving complex problems (Bandeira, Higson-Smith, Bantjes, & Polatin, , 2010). Moreover, survivors of torture typically report peritraumatic dissociations involving impairment in awareness, perceptual changes, and emotional numbing, all of which help to ease pain and manage distress (Lueger-Schuster, 2010). Studies among refugee torture survivors from the Middle East, Asia, Africa, Latin America, and the Balkan regions of Eastern Europe revealed that 6% met diagnostic criteria for dissociative disorders (Ferrada-Noli et al., 1998). Unlike the current PTSD classification system, DESNOS allows for the further assessment of dissociation, including depersonalization and derealization, among this unique population. As per Briere & Spinazzola (2005), these strategies often serve the function of reducing emotional distress during a traumatic

event, as well as reducing the emotional response at a later time when memory of the event is triggered (Briere & Spinazzola, 2005).

The third area of functioning in DESNOS involves alterations in self-perception. According to Herman (1993), victims of prolonged interpersonal trauma involving coercive control often experience profound fragmentation and alterations in their selfconcept. This may include feelings of guilt, shame, hopelessness, or of being ineffectual, permanently damaged, undesirable to others, or at fault for one's own trauma (Blaz-Kapusta, 2008; Luxemberg et al., 2001). When applied specifically to refugee torture survivors, changes in self-perception following torture is a commonly reported symptom. Shame, guilt, humiliation, and fear of being permanently damaged remain a major psychological issue for refugee torture survivors (Shapiro, 2003). Survivors often harbor feelings of being devalued by their torture, including feelings of helplessness due to their inability to resist/defend against the torturer's acts (Shapiro, 2003). Other studies among tortured and traumatized refugees found that subjects with a history of military/political involvement were likely to report feelings of guilt for having survived while their significant others or comrades were either killed or left behind (Ferrada-Noli et al., 1998; Gorman, 2001). Additional changes in self-perception involve feelings of inadequacy and of being ineffectual. A study among refugee torture survivors in South Africa found that on average, subjects scored significantly lower, compared to nontortured samples, on measures of Self-Perception and Functioning and had the tendency to endorse negative perceptions of their capacity to meet the challenges of everyday life (Bandeira et al., 2010). This was found to be especially true among male torture survivors. Hence, changes in a refugee's self-concept and self-regard following torture exposure must also

be assessed prior to diagnosis and treatment. Herman (1993) refers to these deficits in self-perception as a "complex deformation of identity" in which they perceive themselves as contaminated or inherently evil.

The fourth functional impairment that allows for the diagnosis of DESNOS involves victims' perception of their perpetrator. PTSD does not specifically account for the impact of torture on victims' perception of their torturer, and the effects of these perceptions on functioning. Many DESNOS victims find themselves preoccupied with feelings of revenge, anger, or even rage as it relates to their perpetrators. Studies among refugee survivors have found that feelings of hate and revenge are commonly reported among subjects and that facile pronouncements of forgiveness were common coping strategies (Cardoza, Kaiser, Gotway, and Agani, 2003; Stepakoff, Hubbard, Katoh, Falk, Mikulu, Nkhoma, & Omagwa, 2006).

The fifth area of functioning affected by prolonged exposure to trauma is social relationships. Studies among chronically traumatized patients have found significantly higher rates of interpersonal problems, social avoidance, and other relationship disturbances as compared to patients without trauma history (Spitzer, Barnow, Wingenfeld, Rose, Lowe, & Grabe, 2009). According to this framework, individuals may also experience persistent distrust of others, self-isolation, become perpetrators that victimize others, or re-enact their traumas in their relationships (Blaz-Kapusta, 2008). Consistently, studies among refugee torture survivors reveal that feelings of betrayal are often experienced on a number of levels, resulting in a profound lack of trust for authority figures, community members, and even loved ones (Chester & Holtan, 1992). Studies among African refugee torture survivors found that a majority of subjects reported having

difficulty controlling their reactions to others, while nearly half reported having problems connecting to family (Bandeira et al., 2010). Findings from a study among tortured refugees resettled in Turkey revealed that perceived lack of social support from spouses, partners, family, and friends was predictive of anxiety and depressive symptoms (Basoglu, Paker, Ozmen, Tasdemir, & Sahin, 1994). These survivors typically report sexual dysfunction, fear of intimacy, social withdrawal, and other symptoms of social impairment (Gorman, 2001). These symptoms result in persistent self-isolation, distrust of others, patterns of re-victimization, or of becoming a perpetrator that victimizes others. Unlike PTSD, the DESNOS constellation allows for the further assessment and treatment of interpersonal/social impairment, a major barrier to recovery for refugee torture survivors (Ford et al., 2005).

The sixth area of functioning in DESNOS involves somatization. Chronically traumatized individuals often present with chronic physical complaints that defy medical explanation and are resistant to intervention. Clinicians have found that chronically traumatized patients who experience anxiety, hypervigilance, and agitation over time begin to endorse somatic complaints, such as tension headaches, abdominal discomfort, back and pelvic pain, nausea, and tremors (Herman, 1993). Studies conducted among survivors of prolonged captivity have found that somatic problems were nearly a universal complaint, as posttrauma reactions were expressed primarily in somatic terms (Herman, 1993). It is well-documented that for many cultures, somatic complaints serve as an idiom of posttraumatic distress when psychological dysfunction is stigmatized or not widely accepted (Briere & Spinazzola, 2005). Consistently, providers working with refugee torture survivors find that they are more prone to report physical symptoms,

rather than psychological or emotional, as their chief complaint (Chester & Holtan, 1992). This phenomenon is well-documented among cultures where psychological distress remains highly stigmatized, while physical illness or injury are viewed as the only socially acceptable complaint for trauma victims (McCullough-Zander & Larson, 2004). Several study investigators (e.g., Chester & Holtan, 1992; Tamblyn, Calderon, Combs, & O'Brien, 2011) note that specific somatic complaints typically involve areas of the body where the torture was applied, while vague/non-specific complaints are highly prevalent among victims of sexual torture. Other investigators report that despite the lack of evidence for physical cause or disease etiology, many refugee torture survivors commonly report hearing loss, headache, shoulder and back pain, gastrointestinal distress, and joint pain, (Goldfeld et al., 1988; McCullough-Zander & Larson, 2004).

Finally, the seventh area of functioning outlined by DESNOS involves systems of meaning. Individuals with a history of severe trauma often experience significant changes in previously held beliefs, as well as feelings of hopelessness, helplessness, and despair (Jongedijk et al., 1996; van der Kolk et al., 2005). They may experience changes in their religious or ethical belief structures, adopt a fatalistic approach to life, and develop a profound learned helplessness that inhibits them from making important decisions or changes in their lives. In a sample of 1,134 resettled East African refugees, a history of torture and trauma was found to be significantly associated with changes in religious practice, pre-existing beliefs, and helplessness (Jaranson et al., 2004). Moreover, this study revealed that subjects who maintained their religious ties following migration endorsed fewer trauma symptoms and experienced fewer social problems as compared to the nontortured and non-traumatized comparison group. Ferrada-Noli and colleagues'

(1998) study among refugee torture survivors found that a significant number of subjects reported feelings of despair and hopelessness following torture exposure. Given that these symptoms are highly associated with depression and suicidality among traumatized adults, they warrant consistent assessment among refugees.

Summary

DESNOS has been linked to varying types of interpersonal trauma exposure as its proponents argue that it better accounts for the complex symptomatology characterized by survivors of repeated traumatization (Jongedijk et al., 1996). To date, research on DESNOS has been primarily focused on its measurement and validity among Westerners, resulting in a dearth of knowledge on its presentation in non-Western samples (de Jong et al., 2005).

Despite the paucity of empirical research investigating the validity of DESNOS for non-Westerners, the diagnosis is particularly useful in conceptualizing and understanding the trauma reactions of refugee torture survivors. Refugee survivors of torture represent one of the most vulnerable and traumatized populations among us due to their prolonged and severe exposure to war, violence, displacement, and consecutive losses (Lears & Abbott, 2005). These victims may be very different from other trauma survivors, since their trauma often consists of a series of events that were deliberately applied over time, within the context of an interpersonal relationship, in order to elicit a desired psychological result (Velsen, Gorst-Unsworth, & Turner, 1996).

Several investigators point out that the DESNOS diagnosis is highly applicable to victims of long-term suppression and totalitarian control, a feature which is particularly relevant for refugee torture survivors, who are often held against their will for extended

periods of time and whose torture is often sanctioned by oppressive governmental regimes (Berliner et al., 2004; Jaranson et al., 2004; Punamaki, Qouta, & Sarraj, 2010; Thapa et al., 2003). As noted by Herman (1999), complex trauma occurs mainly within the context of captivity, when a victim is unable to flee or under the control of the perpetrator. According to Watters (2001), the PTSD label simply does not give voice to a refugee's own perception and interpretation of these torture experiences at the hands of others.

According to Jongedijk et al. (1996), those providing care to the chronically traumatized should focus psychotherapy on restoring trust in others and regaining stable reactions, rather than working through emotions. This was illustrated in a study among Cambodian refugees that showed that reprocessing traumatic memories was not very useful (Chung, 2001). Chung (2001) adds that counselors working with this population must, above all, be familiar with multicultural counseling competencies, develop a strong working alliance, promote self-empowerment, integrate traditional health methodologies, and understand the influence of culture in the conceptualization of mental health and PTSD in order to effectively treat this population.

Since its conception, DESNOS has been at the center of great controversy by theorists, researchers, and clinicians (Brett, 1996). Opponents of DESNOS as a separate diagnostic category argue that most individuals who meet criteria for DESNOS also meet criteria for PTSD and that DESNOS is essentially an "associated feature" of PTSD. This was supported by the findings of a study of adult survivors of childhood sexual abuse where 92% of the subjects met criteria for both disorders (Ford, 1999). However, later studies showed that not only did DESNOS appear independent of PTSD, its largest

degree of non-overlap was among trauma survivors who suffer the most extreme forms of pathological dissociation, affect dysregulation, and somatization (Ford, 1999). Extremely traumatized individuals were more likely to experience impairments in consciousness, affect, and impulse regulation rather than avoidance, hyperarousal, numbing, fear, and other hallmarks of PTSD. Clinical reports of women exposed to prolonged interpersonal violence, for example, showed that subjects suffering from DESNOS did not typically report psychological sequelae that are captured by the DSM-IV's PTSD diagnostic criteria (Choi, Klein, Shin, & Lee, 2009). A study of Vietnam War veterans who presented for PTSD treatment at a Veterans Administration hospital, found that DESNOS and PTSD were highly co-morbid but distinctly different diagnoses (Ford, 1999).

Despite the National Institute of Mental Health's DSM-IV field trials that confirmed its existence and frequency among trauma victims, DESNOS has yet to be recognized as a free-standing diagnosis within the current or proposed versions of the DSM (Brett, 1996; Bryant, 2010; Spitzer et al., 2009). Instead, the DESNOS symptom constellation is recognized as a non-specified disorder associated with posttraumatic stress and described under the DSM-IV's "associated and descriptive features" of PTSD (APA, 1994). Within the ICD-10, disorders characteristic of DESNOS are referred to as "Lasting Personality Changes following Catastrophic Stress" (Blaz-Kapusta, 2008).

Conclusions

As the number of survivors continues to grow in this country, counselors will increasingly encounter this vulnerable population in a variety of treatment settings, ranging from schools to government agencies (Marotta, 2003). Considering that a significant number of these refugees continue to develop symptoms of posttraumatic

stress, depression, anxiety, sleep disturbance, and somatic complaints even years after exposure to torture, it is imperative that counselors be knowledgeable and skilled in treating their unique patterns of psychological symptoms (Goldfeld et al., 1988; Grodin, et al., 2008; Hargreaves, 2002; Holmqvist et al., 2006; Jaranson et al., 2004; Lindencrona, Ekblad, & Hauff, 2008; Olsen et al., 2007). As demonstrated by Jongedijk and colleagues' (1996) study among Dutch war veterans, DESNOS is a distinct disorder with features that make it distinguishable from simple PTSD. Counselors must recognize the limitations of the current PTSD classification system, as it does not adequately reflect the diversity of symptoms elicited by prolonged exposure to trauma, such as torture, and leads to inadequate treatment interventions (Jongedijk et al., 1996). Above and beyond assessing refugee torture survivors for PTSD, counselors will need to be culturallycompetent and willing to examine the impact of torture on a refugee's self-perception, system of meaning, physical well-being, relationships, and cognitive and affective functioning. Symptomatically, survivors of severe and prolonged trauma often look entirely different than those who experience singular, circumscribed events, such as rape, accidents, disaster, or combat (Herman, 1993). Characterologically, the chronically traumatized often experience personality disturbances that include deficits in their identity development and ability to relate to others. Additionally, they are found to have experienced an increased vulnerability to repeated harm, inflicted by themselves or others (Herman, 1993). Given the accumulating evidence that the PTSD diagnosis does not adequately account for the diversity of symptoms experienced by traumatized refugee torture survivors, this author contends that we must examine the applicability of DESNOS to this population.

References

- Alexander, A. (2011). Introduction to torture. *Torture*, 21(1), 2-7.
- Alexander, A., Blake, S., & Bernstein, M.A. (2007). The staying power of pain: A comparison of torture survivors from Bosnia and Colombia and their rates of anxiety, depression, and PTSD. *Torture*, *17*(1), 1-10.
- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- Amir, N., Leiner, A.S., & Bomyea, J. (2010). Implicit memory and posttraumatic stress symptoms. *Cognitive Therapy Research*, *34*, 49-58.
- Arsdale, P.W.V. & Kennedy, D.F. (1999). Treating refugee victims of torture: Creation of the Rocky Mountains Survivors Center. *Journal of Immigrant Health*, 1(3), 155-164.
- Bandeira, M., Higson-Smith, C., Bantjes, M., & Polatin, P. (2010). The land of milk and honey: A picture of refugee torture survivors presenting for treatment in a South African trauma centre. *Torture*, 20, 92-103.
- Basoglu, M., Paker, M., Ozmen, E., Tasdemir, O., & Sahin, D. (1994). Factors related to long-term traumatic stress responses in survivors of torture in Turkey. *Journal of the American Medical Association*, 272(5), 357-363.
- Berliner, P., Mikkelsen, E.M., Bovbjerg, A., & Wiking, M. (2004). Psychotherapy treatment of torture survivors. *International Journal of Psychosocial Rehabilitation*, 8, 85-96.
- Blaz-Kapusta, B. (2008). Disorders of Extreme Stress Not Otherwise Specified (DESNOS) A case study. *Archives of Psychiatry and Psychotherapy*, 2, 5-11.

- Bohleber, W. (2006). Various problems of psychoanalytic trauma theory. Paper presented at EPF Conference in Athens GA, April 6, 2009.
- Brett, E.A. (1996). The classification of posttraumatic stress disorder. In B.A. van der Kolk, A.C. McFarlane, & L. Weisaeth (Eds.), *Traumatic stress: The effects of overwhelming experience on mind, body, and society* (pp. 117-128). New York, NY: The Guilford Press.
- Brewin, C.R. (2007). Autobiographical memory for trauma: Update on four controversies. *Memory*, *15*(3), 227-248.
- Briere, J. & Spinazzola, J. Phenomenology and psychological assessment of complex posttraumatic states. *Journal of Traumatic Stress*, 18(5), 401-412.
- Bryant, R.A. (2010). *American Journal of Psychiatry*, 167(8), 879-881.
- Cantor, C. & Price, J. (2007). Traumatic entrapment, appeasement and complex posttraumatic stress disorder: evolutionary perspectives of hostage reactions, domestic abuse and the Stockholm syndrome. *Australian and New Zealand Journal of Psychiatry*, 41, 377-384.
- Carlsson, J.M., Mortensen, E.L., Kastrup, M. (2006). Predictors of mental health and quality of life in male tortured refugees. *Nordic Journal of Psychiatry*, 60(1), 51-57.
- Caspi, Y., Gil, S., Ben-Ari, I.Z., & Koren, D. (2005). Memory of traumatic event is associated with increased risk for PTSD: A retrospective study of patients with traumatic brain injury. *Journal of Loss and Trauma*, *10*, 319-335.
- Chester, B. & Holtan, N. (1992). Working with refugee torture survivors. *Western Journal of Medicine*, 157(3), 301-304.

- Choi, Klein, Shin, & Lee,. (2009). Posttraumatic Stress Disorder (PTSD) and Disorders of Extreme Stress (DESNOS) symptoms following prostitution and childhood abuse. *Violence against Women*, *15*(8), 933-951.
- Chung, C. (2001). Psychosocial adjustment of Cambodian refugee women: Implications for mental health counseling. *Journal of Mental Health Counseling*, 23(2), 115-126.
- Chung, R. & Kagawa-Singer, M. (1993). Predictors of psychological distress among Southeast Asian refugees. *Social Science Medicine*, *36*, 631-639.
- Cook, A., Blaustein, M., Spinazzola, J., & van der Kolk, B. (Eds.) (2003). *Complex trauma in children and adolescents*. National Child Traumatic Stress Network. http://www.NCTSNet.org.
- de Jong, J., Komproe, I.H., & Ommeren, M.H. (2001). Lifetime events and posttraumatic stress disorder in 4 postconflict settings. *JAMA*, 286, 555-562.
- de Jong, J., Komproe, I.H., Spinazzola, J., van der Kolk, B.A., & Ommeren, M.H. (2005).

 DESNOS in three postconflict settings: Assessing cross-cultural construct equivalence. *Journal of Traumatic Stress*, 18(1), 13-21.
- de Vries, M.W. (1996). Trauma in cultural perspective. In B.A. van der Kolk, A.C.

 McFarlane, & L. Weisaeth (Eds.), *Traumatic stress: The effects of overwhelming*experience on mind, body, and society (pp. 398-413). New York, NY: The

 Guilford Press.
- Eisenman, D.P., Gelberg, L., Liu, H., & Shapiro, M.F. (2003). Mental Health and Health-Related Quality of Life Among Adult Latino Primary Care Patients Living in the

- United States With Previous Exposure to Political Violence. *Journal of the American Medical Association*, 290, 627-634.
- Ellis, H., MacDonald, H., Lincoln, A., & Cabral, H. (2008). Mental health of Somali adolescent refugees: The role of trauma, stress, and perceived discrimination. *Journal of Consulting & Clinical Psychology*, 76, 184-193)
- Elsass, P., Carlsson, J., Jespersen, K., & Phuntsok, K. (2009). Questioning Western assessment of trauma among Tibetan torture survivors: A quantitative assessment study with comments from Buddhist Lamas. *Torture*, *19*(3), 194-203.
- Ferrada-Noli, M., Asberg, M., Ormstad, K., Lundin, T., & Sundbom, E. (1998). Suicidal behavior after severe trauma, Part 1: PTSD diagnosis, psychiatric comorbidity, and assessments of suicidal behavior. *Journal of Traumatic Stress*, 11(1), 103-112.
- Foa, E.B., Molnar, C., & Cashman, L. (1995). Change in rape narratives during exposure therapy for posttraumatic stress disorder. *Journal of Traumatic Stress*, 8(4), 675-690.
- Ford, J.D. (1998). Ethnoracial minority background, psychological trauma, PTSD, and DESNOS among urban low-income women with severe mental illness. *Journal of Psychological Trauma*, 7(3), 170-184.
- Ford, J.D. (1999). Disorder of extreme stress following war-zone military trauma:

 Associated features of Posttraumatic Stress Disorder or comorbid but distinct syndromes? *Journal of Consulting and Clinical Psychology*, 67(1), 3-12.

- Ford, J.D., Courtois, C.A., Steele, K., van der Hart, O., & Nijenhuis, E.R.S. (2005).

 Treatment of complex posttraumatic self-dysregulation. *Journal of Traumatic Stress*, 18(5), 437-447.
- Ford, J.D., Stockton, B., Kaltman, S., & Green, B.L. (2006). Disorders of Extreme Stress (DESNOS) symptoms are associated with type and severity of interpersonal trauma exposure in a sample of healthy young women. *Journal of Interpersonal Violence*, 21(11), 1399-1416.
- Gil, S., Caspi, Y., Ben-Ari, I.Z., Koren, D., & Klein, E. (2005). Does memory of traumatic event increase the risk for posttraumatic stress disorder in patients with traumatic brain injury? A prospective study. *American Journal of Psychiatry*, 162, 963-969.
- Goldfeld, A.E., Mollica, R.F., Pesavento, B.H., Faraone, S.V. (1988). The physical and psychological sequelae, of torture: Symptomatology and diagnosis. *Journal of the American Medical Association*, 259(18), 2725-2729.
- Gong-Guy, E., Cravens, R.B., & Patterson, T.E. (1991). Clinical issues in mental health service delivery to refugees. *American Psychologist*, 46(6), 642-648.
- Gorman, W. (2001). Refugee survivors of torture: Trauma and treatment. *Professional Psychology: Research and Practice*, 32, 443-451.
- Grzesiak, R.C. & Hicok, D.A. (1994). A brief history of psychotherapy and physical disability. *American Journal of Psychotherapy*, 48(2), 240-250.
- Grodin, M.A., Piwowarczyk, L., Fulker, D., Bazazi, A., & Saper, R. (2008). Treating survivors of torture and refugee trauma: A preliminary case series using Qigong an Tai'Chi. *Journal of Alternative & Complementary Medicine*, 14, 801-806

- Hargreaves, S. (2002). A body of evidence: Torture among asylum seekers to the West. *The Lancet*, *359*, 793-794.
- Hadley, C. & Patil, C. (2009). Perceived discrimination among three groups of refugees resettled in the USA: Associations with language, time in the USA, and continent of origin. *Journal of Immigrant & Minority Health*, 11, 505-512.
- Heim, G. & Buhler, K. (2006). Psychological trauma and fixed ideas in Pierre Janet's conception of dissociative disorders. *American Journal of Psychotherapy*, 60(2), 111-129.
- Herman, J.L. (1992). Complex PTSD: A syndrome in survivors of prolonged and repeated trauma. *Journal of Traumatic Stress*, *5*(3), 377-391.
- Herman, J.L. (1993). Sequelae of prolonged and repeated trauma: Evidence for a complex posttraumatic syndrome (DESNOS). *Posttraumatic Stress Disorder: DSM and Beyond*, 213-228.
- Holmqvist, R., Anderson, K., Anjum, T., & Alinder, B. (2006). Change in self-image and PTSD symptoms in short-term therapies with traumatized refugees.

 *Psychoanalytic Psychotherapy, 20, 251-265.
- Holtz, T.H. (1998). Refugee trauma versus torture trauma: A retrospective controlled cohort study of Tibetan refugees. *The Journal of Nervous & Mental Disease*, *186*(1), 24-34.
- Hooberman, J.B., Rosenfeld, B., Lhewa, D., Rasmussen, A., & Keller, A. (2007).

 Classifying the torture experiences of refugees living in the United States. *Journal of Interpersonal Violence*, 22(1), 108-123.

- Hougen, H.P., Kelstrup, J., Petersen, H.P., & Rasmussen, O.V. (1988). Sequelae to torture: A controlled study of torture victims living in exile. *Forensic Science International*, *36*, 153-160.
- Jaranson, J.M., Butcher, J., Halcon, L., Johnson, D.R., Robinson, C., Savik, K., Spring,
 M., Westermeyer, J. (2004). Somali and Oromo refugees: Correlates of torture
 and trauma history. *American Journal of Public Health*, 94, 591-598.
- Jelinek, L., Randjbar, S., Seifert, D., Kellner, M., & Moritz, S. (2009). The organization of autobiographical and non-autobiographical memory in posttraumatic stress disorder (PTSD). *Journal of Abnormal Psychology*, *18*, 288-298.
- Jongedijk, R.A., Carlier, I.V.E., Shreuder, B.J.N. & Gersons, B.P.R. (1996). Complex posttraumatic stress disorder: An exploratory investigation of PTSD and DES NOS among Dutch war veterans. *Journal of Traumatic Stress*, 9(3), 577-586.
- Kenny, L.M., Bryant, R.A., Selove, D., Creamer, M., O'Donnell, M., & McFarlane, A.C. (2009). Distant memories: A prospective study of vantage point of trauma memories. *Psychological Science*, 20, 1049-1052.
- Kira, I., Templin, T., Lewandowski, L., Clifford, D., Wiencek, P., Hammad, A., Mohanesh, J., & Al-haidar, A. (2006). The effects of torture: Two community studies. *Peace and Conflict: Journal of Peace Psychology*, *12*(3), 205-228.
- Kira, I., Lewandowski, L., Templin, T., Ramaswamy, V., Ozkan, B., & Mohanesh, J. (2008). Measuring cumulative trauma dose, types, and profiles using a development-based taxonomy of traumas. *Traumatology*, *14*(2), 62-87.

- Kira, I., Smith, I., Lewandowski, L., & Templin, T. (2010). The effects of gender discrimination on refugee torture survivors: A cross-cultural traumatology perspective. *Journal of the American Psychiatric Association*, 16, 299-306.
- Kroll, J., Yusuf, A.I., & Fujiwara, K. (2011). Psychoses, PTSD, and depression in Somali refugees in Minnesota. Social Psychiatry and Psychiatric Epidemiology, 46, 481-493.
- Lears, LO & Abbott, JS. (2005). The most vulnerable among us. *Health Progress*, 86(1), 22-25.
- Liebenberg, H. & Papaikonomou, M. (2010). Complex trauma: Reflections on the effect of early childhood abuse among a small adult group of bariatric patients. *South African Journal of Psychology*, 40(3), 327-337.
- Lindencrona, F., Ekblad, S., Hauff, E. (2008). Mental health of recently resettled refugees from the Middle East in Sweden: The impact of pre-resettlement trauma, resettlement stress and capacity to handle stress. *Social Psychiatry and Psychiatric Epidemiology*. *43*,121-131.
- Lindblom, K.M. & Gray, M.J. (2010). Relationship closeness and trauma narrative detail:

 A critical analysis of betrayal trauma theory. *Applied Cognitive Psychology*, 24,

 1-19.
- Lueger-Schuster, B. (2010). Supporting interventions after exposure to torture. *Torture*, 20, 32-44.
- Luxenberg, T., Spinazzola, J., & van der Kolk, B.A. (2001). Complex trauma and Disorders of Extreme Stress (DESNOS) diagnosis, Part One: Assessment. Directions in Psychiatry, 21, 373-392.

- Marotta, S.A. (2003). Unflinching empathy: Counselors and tortured refugees. *Journal of Counseling & Development*, 81, 111-114.
- McColl, H., Higson-Smith, C., Gjerding, S., Omar, M.H., Rahman, B.A., Hamed, M., El
 Dawla, A.S., Fredericks, M., Paulsen, N., Shabalala, G., Low-Shang, C., Perez,
 F.V., Colin, L.S., Hernandez, A.D., Lavaire, E., Zuniga, A.P., Colidonio, L.,
 Martinez, C.L., Jamei, Y.A, & Awad, Z. (2010). Rehabilitation of torture
 survivors in five countries: Common themes and challenges. *International Journal of Mental Health Systems*, 4,1-10.
- McCullough-Zander, K. & Larson, S. (2004). The fear is still in me: Caring for survivors of torture. *American Journal of Nursing*, 104(10), 54-64.
- Momartin, S. & Coello, M. (2006). Self-harming behavior and dissociation in complex PTSD: Case study of a male tortured refugee. *Torture*, *16*(1), 20-29.
- Monroe, S.M. & Mineka, S. (2008). Placing the mnemonic model in context: Diagnostic, theoretical, and clinical considerations. *Psychological Review*, *115*, 1084-1098.
- Morina, N. & Ford, J. (2008). Complex sequelae of psychological trauma among

 Kosovar civilian war victims. *International Journal of Social Psychiatry*, *54*, 425436.
- Nawyn, S. (2010). Institutional structures of opportunity in refugee resettlement: Gender, race/ethnicity, and refugee NGOs. *Journal of Sociology & Social Welfare, 37*, 149-167
- Newall, M. (2007). Torture victims find U.S. a source of hope and new fears. National Catholic Report, November 9, 2007.

- Nicholl, C. & Thompson, A. (2004). The psychological treatment of Posttraumatic Stress Disorder (PTSD) in adult refugees: A review of the current state of psychological therapies. *Journal of Mental Health*, *13*(4), 351-362.
- Olsen, D.R., Montgomery, E., Bojholm, S., & Foldspang, A. (2007). Prevalence of pain in the head, back, and feet of refugees previously exposed to torture: A ten-year follow-up study. *Disability and Rehabilitation*, 29, 163-171.
- Pham, P.N., Weinstein, H.M., & Longman, T. (2004). Trauma and PTSD symptoms in Rwanda: Implications for attitudes toward justice and reconciliation. *Journal of the American Medical Association*, 292, 602-612.
- Pope, K.S. (2001). Torture. In J. Worrell's (Ed.). Encyclopedia of Women and Gender:

 Sex Similarities and Differences and the Impact of Society on Gender. San Diego,

 CA: Academic Press.
- Punamaki, R., Qouta, S.R., & El Sarraj, E. (2010). Nature of torture, PTSD, and somatic symptoms among political ex-prisoners. *Journal of Traumatic Stress*, 23, 532-536.
- Regel, S. & Berliner, P. (2007). Current perspectives on assessment and therapy with survivors of torture: The use of a cognitive behavioural approach. *European Journal of Psychotherapy and Counselling*, 9(3), 289-299.
- Rubin, D.C., Berntsen, D., & Bohni, M.K. (2008). A memory-based model of posttraumatic stress disorder: Evaluating basic assumptions underlying the PTSD diagnosis. *Psychological Review*, 115, 985-1011.

- Sachs, E., Rosenfeld, B., Llewa, D., Rasmussen, A., & Keller, A. (2008). Entering exile:

 Trauma, mental health, and coping among Tibetan refugees arriving in

 Dharamsala, India. *Journal of Traumatic Stress*, 21(2), 199-208.
- Schubert, C.C. & Punamaki, R. (2011). Mental health among torture survivors: Cultural background, refugee status and gender. *Nordic Journal of Psychiatry*, 65(3), 175-182.
- Schweitzer, R., Melville, F., Steel, Z., & Lacherez, P. (2006). Trauma, post-migration living difficulties, and social support as predictors of psychological adjustment in resettled Sudanese refugees. *Australian and New Zealand Journal of Psychiatry*, 40, 179-187.
- Shapiro, D. (2003). The tortured, not the torturers, are ashamed. *Social Research*, 70(4), 1131-1148.
- Shoeb, M., Weinstein, H., & Mollica, R. (2007). The Harvard Trauma Questionnaire:

 Adapting a cross-cultural instrument for measuring torture, trauma, and

 Posttraumatic Stress Disorder in Iraqi refugees. *International Journal of Social Psychiatry*, 53, 447-463.
- Shrestha, N.M., Sharma, B., Ommeron, M.V., Regmi, S.R., Makaju, R., Komproe, I., Shrestha, G.B., & de Jong, J. (1998). Impact of torture on refugees displaced within the developing world: Symptomatology among Bhutanese refugees in Nepal. *Journal of the American Medical Association*, 290(5), 443-448.
- Sjolund, B.H., Kastrup, M., Montgomery, E., & Persson, A.L. (2009). Rehabilitating torture survivors. *Journal of Rehabilitation Medicine*, 41, 689-696.

- Spitzer, C., Barnow, S., Wingenfeld, K., Rose, M., Lowe, B., Grabe, H.J. (2009).

 Complex posttraumatic stress disorder in patients with somatization disorder.

 Australian and New Zealand Journal of Psychiatry, 43, 80-86.
- Steel, Z., Chey, T., Silove, D., Marnane, C., Bryant, R.A., & Ommeren, M. (2009).

 Association of torture and other potentially traumatic events with mental health outcomes among populations exposed to mass conflict and displacement: A systematic review and meta-analysis. *Journal of the American Medical Association*, 302(5), 537-549.
- Stepakoff, S., Hubbard, J., Katoh, M., Falk, E., Mikulu, J., Nkhoma, P., & Omagwa, Y.
 (2006). Trauma healing in refugee camps in Guinea: A psychosocial program for
 Liberian and Sierra Leonean survivors of torture and war. American Psychologist,
 921-932.
- Summerfeld (1999). A critique of seven assumptions behind psychological trauma programmes in war-affected areas. *Social Science & Medicine*, 49, 1449-1462.
- Tamblyn, J.M., Calderon, A.J., Combs, S., & O'Brien, M.M. (2011). Patients from abroad becoming patients in everyday practice: Torture survivors in primary care.

 *Journal of Immigrant Minority Health, 13, 798-801.
- Thapa, S.B., Ommeren, M.V., Sharma, B., de Jong, J., Hauff, E. (2003). Psychiatric disability among tortured Bhutanese Refugees in Nepal. *American Journal of Psychiatry*, *160*, 2032-2037.
- Turner, S. & Gorst-Unsworth, C. (1990). Psychological sequelae of torture: A descriptive model. *British Journal of Psychiatry*, *157*, 475-480.

- United Nations High Commissioner for Refugees. (1951). Convention and Protocol Related to the Status of Refugees. *General Provisions*, January 1967, 14-16.
- United Nations Convention against Torture. (1985). Convention against Torture and
 Other Cruel, Inhuman or Degrading Treatment or Punishment, December 1984.
- United Nations High Commissioner for Refugees. (2008). Refugees, Asylum-Seekers, Returnees, Internally-Displaced, and Stateless Persons. 2007 Global Trends, June 2008, 1-21.
- United Nations High Commissioner for Refugees. (2010). Refugees, Asylum-Seekers, Returnees, Internally-Displaced, and Stateless Persons. 2009 Global Trends, June 2010, 1-30.
- van der Kolk, B.A. (1996). Trauma and memory. In B.A. van der Kolk, A.C. McFarlane, & L. Weisaeth (Eds.), *Traumatic stress: The effects of overwhelming experience on mind, body, and society* (pp. 279-302). New York, NY: The Guilford Press.
- van der Kolk, B.A. & McFarlane, A.C. (1996). The black hole of trauma. In B.A. van der Kolk, A.C. McFarlane, & L. Weisaeth (Eds.), *Traumatic stress: The effects of overwhelming experience on mind, body, and society* (pp. 3-23). New York, NY: The Guilford Press.
- van der Kolk, B.A. & McFarlane, A.C. (1996). A general approach to treatment of posttraumatic stress disorder. In B.A. van der Kolk, A.C. McFarlane, & L. Weisaeth (Eds.), *Traumatic stress: The effects of overwhelming experience on mind, body, and society* (pp. 417-440). New York, NY: The Guilford Press.

- van der Kolk, B.A., Roth, S., Pelcovitz, D., Sunday, S., & Spinnazola, J. (2005).

 Disorders of extreme stress: The empirical foundation of a complex adaptation to trauma. *Journal of Traumatic Stress*, 18(5), 389-399.
- van der Kolk, B.A., Weisaeth, L., & van der Hart, O. (1996). History of Trauma in Psychiatry. In B.A. van der Kolk, A.C. McFarlane, & L. Weisaeth (Eds.),

 Traumatic stress: The effects of overwhelming experience on mind, body, and
 society (pp. 47-74). New York, NY: The Guilford Press.
- Velsen, C.V., Gorst-Unsworth, C., & Turner, S. (1996). Survivors of torture and organized violence: Demography and diagnosis. *Journal of Traumatic Stress*, 9(2), 181-193.
- Watters, C. (2001). Emerging paradigms in the mental health care of refugees. *Social Science & Medicine*, 52, 1709-1718.
- Weine, S.M., Becker, D.F., Vojvoda, D., Hodzic, E., Sawyer, M., Hyman, L., Laub, D., McGlashan, T.H. (1998). Individual change after genocide in Bosnian survivors of "ethnic cleansing": Assessing personality dysfunction. Journal of Traumatic Stress, 11(1), 147-153.
- Wenk-Ansohn, M. (2007). Treatment of torture survivors Influences of the exile situation on the course of the traumatic process and therapeutic possibilities.

 Torture, 17, 88-95.
- Whittaker, S. (1998). Counseling torture victims. *The Counseling Psychologist*, *16*, 272-278.
- Williams, W.I. (2006). Complex trauma: Approaches to theory and treatment. *Journal of Loss and Trauma*, 11, 321-335.

- Zlotnick, C., Zabriski, A.L., Shea, M.T., Costello, E., Begin, A., Pearlstein, T., & Simpson, E. (1996). The long-term sequelae of sexual abuse: Support for a complex posttraumatic stress disorder. *Journal of Traumatic Stress*, *9*(2), 195-205.
- Zoellner, L.A., Alvarez-Conrad, J. & Foa, E.B. (2002). Peritraumatic dissociative experiences, trauma narratives, and trauma pathology. *Journal of Traumatic Stress*, *15*(1), 49-57.
- Zucker, M., Spinazzola, J., Blaustein, M., & van der Kolk, B.A. (2006). Dissociative symptomatology in Posttraumatic Stress Disorder and Disorders of Extreme Stress. *Journal of Trauma & Dissociation*, 7(1), 19-31.

'MEANS OF SURVIVAL' AS MODERATOR OF THE RELATIONSHIP BETWEEN CUMULATIVE TORTURE EXPERIENCES AND POSTTRAUMATIC STRESS DISORDER AMONG REFUGEES

Introduction

The aim of the present study was to examine the association between torture exposure and posttraumatic stress symptoms, as moderated by coping, among a sample of adult refugee survivors of torture. Evidence suggests that between 5% and 35% of refugees who present in resettlement camps and treatment centers around the world are victims of torture (Jaranson, Butcher, Halcon, Johnson, Robinson, Savik, Spring, & Westermeyer, 2004). Torture is defined as any act that involves the use of severe pain or suffering, whether physical or psychological, that is intentionally inflicted upon a victim for the purposes of punishment, obtaining information, discrimination, or intimidation/coercion, by a public official or person acting in official capacity (UNCAT, 1985). According to Marotta (2003), the ultimate purpose of torture is to "break the spirit of individuals or groups through systematic application of painful physical or mental procedures" (p. 111). Recent reports show that cruel, inhuman, and degrading torture practices are routinely used by contemporary regimes around the world, despite the 1955 ratification of the Geneva Conventions that made the use of torture a war crime (McCullough-Zander & Larson, 2004; Punamaki, Qouta, & Sarraj, 2010). The use of torture remains a global public health problem that has long-standing impact on individuals, families and communities (Grodin, Piwowarczyk, Fulker, Bazazi, & Saper, 2008), and even those who treat survivors (Marotta, 2003). With nearly half a million

refugee torture survivors in the US, counselors are increasingly likely to encounter this unique population in clinical practice (Gorman, 2001; Newall, 2007).

According to Gong-Guy and colleagues (1991), refugee survivors of torture often present with a myriad of psychosocial problems and challenges stemming from their exposure to torture and other pre- and post-settlement experiences. Studies show that they suffer from high rates of psychoses (Kroll, Yusuf, & Fujiwara, 2011), somatic complaints and chronic pain (Goldfeld, Mollica, Pesavento, & Faraone, 1988; Punamaki, Qouta, & El Sarraj, 2010), substance abuse (Holmqvist, Anderson, Anjum & Alinder, 2006), depression (Ellis, MacDonald, Lincoln, & Cabral, 2008), anxiety symptoms (Sachs, Rosenfeld, Llewa, Rasmussen, & Keller, 2008), dissociative disorders (Thapa, Van Ommeren, Sharma, de Jong, Hauff, 2003), and impaired memory (Gorman, 2001). It is even estimated that between 16-37% of refugee survivors of torture suffer from lifetime posttraumatic stress disorder (PTSD) (de Jong et al., 2001). PTSD is a chronic condition that involves the re-experiencing of traumatic events, heightened arousal, avoidant behaviors and emotional numbing that inhibit normal functioning (Jaranson et al., 2004; Ford, Stockton, Kaltman, and Green, 2006).

Research suggests that a significant number of refugees continue to develop symptoms of posttraumatic stress, depression, anxiety, sleep disturbance, and somatic complaints even years after exposure to torture (Grodin, et al., 2008; Hargreaves, 2002; Holmqvist et al., 2006; Jaranson et al., 2004; Lindencrona, Ekblad, & Hauff, 2008; Olsen, Montgomery, Bojholm, & Foldspang, 2007). These traumatic experiences are a major burden on the lives of refugees and carry an enormous cost to society when left unaddressed.

It is well-documented that torture exposure not only has significant impact on refugee psychosocial functioning, but has deleterious effects on their capacity to resettle and integrate into a new society (Grodin et al., 2008). Refugee victims of torture will experience significant levels of distress and a plethora of social difficulties stemming from resettlement, as compared to voluntary immigrant groups (Schweitzer, Melville, Steel, & Lacherez, 2006). Exacerbating their trauma symptoms, refugees must deal with a host of adverse issues, including ongoing uncertainty regarding their temporary status and residence, subjection to degrading bureaucratic acts and social aid, isolation, xenophobia, and lack of access to adequate medical and psychological care (Wenk-Ansohn, 2007). Additionally, refugees resettled in the West must grapple with post-migration stress, including social and economic strain, discrimination, acculturation, status loss, and prolonged separation from family and loved ones (Kira, Templin, Lewandowski, Clifford, Weincek, Hammad, Mohanesh, & Al-haidar, 2006; Lindencrona, Ekblad, & Hauff, 2008).

It is estimated that roughly 400,000 to 500,000 refugee torture survivors reside in the United States alone (Gorman, 2001; Newall, 2007). Determining the exact number is made difficult by the frequent reluctance of refugees to disclose such experiences due to shame, fear of legal consequences for themselves or families left behind, distrust, fear of stigma, or guilt associated with having survived (Blaz-Kapusta, 2008; Chester & Holtan, 1992; Chung, 2001; Regel & Berliner, 2007). It is also well documented that many torture survivors find it difficult to identify care providers and health professionals who are adequately trained and willing to attend to their torture stories (Goldfeld et al., 1988; Gorman, 2001). Considering that torture exposure is associated with a number of

psychological and medical problems, it has become essential that providers be knowledgeable and skilled in identifying the factors involved in the development of posttraumatic stress reactions in this population (UNHCR, 2008; Kanninen, Punamaki, & Qouta, 2002). As the number of survivors continues to grow in this country, mental health providers will increasingly encounter this vulnerable population in a variety of treatment settings, ranging from schools to government agencies (Marotta, 2003).

Several studies among refugees have noted the importance of coping behaviors and beliefs in the amelioration of psychological distress, improved quality of life, and positive therapeutic outcomes (Brune, Haasen, Krausz, Yagdiran, Bustos, & Eisenman, 2002; Schweitzer, Melville, Steel, & Lacharez, 2007). One study among 141 traumatized refugees demonstrated that having firm religious and political belief systems served as a protective buffer against PTSD (Brune et al., 2002). Coping refers to the cognitive and behavioral efforts to master, reduce, or tolerate exposure to an internal and/or external demand that is created by a stressful situation (Folkman & Lazarus, 1980). As argued by a number of investigators (e.g., Zautra & Wrabetz, 1991; Ghazinour, Richter & Eisemann, 2003), coping plays a critical role in shaping the meaning of traumatic life events and the impact of these stressors on functioning. According to Kanninen, Punamaki, & Qouta (2002), understanding a torture survivor's coping efforts is important in treatment, because these efforts can be directed towards more adaptive ways of dealing with their trauma memories.

Why certain individuals develop lasting symptoms as a result of traumatic life events, while others do not, has increasingly become a central focus in the field of trauma research (Van der Kolk, McFarlane, & Weisaeth, 1996). Among refugee torture

survivors, social support, religion, and political beliefs are the most commonly reported cognitive and/or behavioral strategies and have been shown to be associated with psychological distress (i.e., depression, anxiety, somatization, and posttraumatic stress disorder [PTSD]) (Brune et al., 2002). Studies show that social support, defined as the exchange of resources intended to enhance the well-being of a recipient, has been negatively associated with depression and somatic symptoms among refugee survivors of torture (Emmelcamp, Komproe, Van Ommeren, & Schagen, 2002; Gerritsen, Bramsen, Deville, van Willigen, Hovens, & van der Ploeg, 2006). Other investigations have determined that religious beliefs and political conviction, in addition to strong social supports, serve as protective factors against PTSD among refugee torture victims (Basoglu, Paker, Paker, Ozmen, Marks, Incesu, Sahin, & Sarimurat, 1994). This was evidenced in a large-scale study among 769 Tibetan refugees that revealed that psychological distress increased significantly with greater trauma exposure, and that religious practice, seeking social support, and other direct action strategies mediated the effects of between these two variables by diminishing psychological distress (Sachs et al., 2008).

Studies on the different types of refugee torture experiences have typically differentiated between three categories; physical assault, psychological abuse, and warrelated trauma (Hooberman, Rosenfeld, Lhewa, Rasmussen, & Keller, 2007; Shrestha, Sharma, Ommeron, Regmi, Makaju, Komproe, Shrestha, & de Jong, 1998). Physical assault includes acts such as burning, hanging, forced standing, asphyxiation, and electric shock; while psychological torture includes death threats, humiliation, solitary confinement, sensory deprivation, and being forced to witness violence (Berliner,

Mikkelsen, Bovbjerg, & Wiking, 2004; Punamaki, Qouta, & Sarraj, 2010). War-related trauma, on the other hand, involves acts that are not solely directed at the individual, but target groups of people more broadly. Examples may include exposure to combat or war, cutoff to food and water supplies, disappearances of loved ones, and displacement. On the other hand, the Chilean Human Rights Commission has identified at least eighty-five different types of physical torture alone (Berliner et al., 2004). Despite the distinctions made between these categories, evidence suggests that the consequences of torture are broad and overlapping, and that regardless of torture type, many of the same psychological repercussions may be elicited (Hooberman et al., 2007). Though research has shown a clear association between torture and PTSD symptoms, there exist no research studies to date on the effect of *varying types of* torture on PTSD symptoms as moderated by coping among refugee survivors.

To date, only one study that was conducted among 62 newly-arrived Vietnamese ex-political torture survivors demonstrated a strong dose-effect relationship between cumulative torture experiences (the number of torture types) and PTSD arousal symptoms (Mollica, McInnes, Pham, Smith, Murphy, & Lin, 1998). In this sample, researchers found that the more types of torture experienced (dose), the more psychological distress (effect) was endorsed among refugees. Although not limited to torture, another study among Iraqi refugees by Kira and colleagues (2008) demonstrated that exposure to ongoing traumas (e.g., displacement, natural disasters, violence, etc) had the same cumulative (dose) effect on posttraumatic stress. According to Quiroga and Jaranson (2005), future research needs to explore the mental health effects of torture and

refugee trauma and examine how various traumatic stressors associated with these events interact in producing symptoms commonly observed in this population.

The present study examined the association between torture exposure and posttraumatic stress symptoms among a sample of 326 adult refugees. The moderating effect of 'means of survival' (the resources subject drew upon to cope with torture) on the relationship between cumulative torture experiences (the number of torture types) and posttraumatic stress disorder (PTSD) symptoms were analyzed. Consistent with the literature, the study investigator hypothesized that exposure to a greater number of torture types would be significantly associated with increased PTSD symptom severity and that the relationship between cumulative torture experience and PTSD would be buffered by means of survival among this sample. That is, the more means of survival coping processes endorsed, the weaker the relationship between cumulative torture experiences and posttrauma symptoms. This hypothesis is consistent with Mollica and colleagues (1998) finding of a strong dose-effect relationship between cumulative torture experiences and PTSD, and Sachs et al.'s support of the moderating role of coping in the relationship between torture and trauma.

Method

Participants

The study sample consisted of 326 adult torture survivors who presented for services between April 2008 and September 2009 at a refugee resettlement agency located in the Midwest. Participants were defined as refugees in accordance to UNHCR's 1951 criteria that they were persons who are outside their country of national origin and are unable or unwilling to return due to a well-founded fear of persecution, for reasons of

race, religion, nationality, social group or political opinion (UNHCR, 1951). Study participants presented at the resettlement agency for case management and social services support, assistance with immigration, employment/educational support, family counseling, and outreach services. Following the initial intake, trained interviewers screened subjects for enrollment eligibility, obtained informed consent, collected sociodemographic information, administered measures of posttraumatic stress and cumulative trauma disorders, and documented detailed accounts of all reported torture experiences. Each interview took approximately two hours to complete and was conducted in the native language of the participant. All participants reported exposure to one or more torture methods prior to displacement.

Measures

Dependent Variable

The Clinician Administered PTSD Scale (CAPS-2) was used to assess PTSD symptom severity among study subjects (Weathers, Keane, & Davidson, 2001). This 18-item instrument consists of four subscales designed to measure re-experiencing, avoidance, arousal, and dissociation/numbness (DSM-IV diagnostic criteria for PTSD). Subjects were asked to rate the frequency and severity of their PTSD symptoms within the past week on a 5-point Likert scale (ranging from 0 "not at all" to 5 "more than once/day"). The total severity score was summed and interpreted according to the following scale: 0–19 = asymptomatic/few symptoms, 20–39 = mild PTSD/subthreshold, 40–59 = moderate PTSD/threshold, 60–79 = severe PTSD symptomatology, and >80 = extreme PTSD symptomatology. A cut-off total score of 26 was sufficient to be classified as presenting with PTSD symptoms (Kira et al., 2008). The instrument

yielded excellent inter-rater reliability (alpha .92 to .99.), high internal consistency (alpha .73 to .85), good discriminant validity, and in regards to convergent validity, correlated strongly with other standardized measures of PTSD (alpha .70 to .84)(Weathers et al., 2001).

Independent Variable

Data collected from the Torture Severity Scale was used to evaluate Cumulative Torture Experiences (CTE) among study subjects (Kira, Lewandowski, Templin, Ramaswamy, Ozkan, Hammad, & Mohanesh, 2006). This 16-item self-report instrument was modified from a form developed by Survivors International to measure torture. CTE measures the frequency of exposure to torture acts. Respondents are asked to report the number of times they were jailed and tortured, or suffered exposure to beatings, electric shock, burnings, upside down suspensions, suffocation, penetration, rape, and other forms of abuse. It categorizes these torture experiences into six subcategories (i.e., witness torture, physical torture, sexual torture, loss control of basic life routine, aggressive environmental control, and formal accusation). The sum of torture types endorsed was used to calculate CTE score. The higher the score on this instrument indicated the higher the severity of exposure to torture (i.e., higher the number of different types of torture endured). According to Kira and colleagues (2006), the measure yielded good reliability (alpha .87), and good concurrent convergent, divergent, predictive, and construct validity. Moderating Variables

The Means of Survival Scale (MOS) is a 16-item measure of the types of strategies utilized during a subject's exposure to torture (Kira, 2012). These items

represent a host of resources/areas of strength that the subjects drew upon to cope with

their torture trauma. Subjects were asked to respond to the question "what helped you to survive your torture?" and presented with a list of sixteen coping processes that included, luck/chance/fate, desire for revenge, humor/irony, cellmates, cooperation with torturers, deception of torturers, emotional distancing, physical exercise, forgiveness, or community/party/tribe support. Subjects were asked to answer affirmatively (an answer of 'yes') to the strategies that were utilized. For the present study, only four items from the MOS were examined as moderating variables (i.e., religious beliefs, family support, will to survive, political beliefs). Studies demonstrate that these are the most commonly reported cognitive and/or behavioral strategies utilized among refugees (Brune et al., 2002).

Demographic data was also collected as part of the intake process. These variables included age, gender, years of education, marital status, ethnicity, current residency status, previous occupation, length of stay in host countries, and religious affiliation.

Data Analysis

A power analysis was initially conducted utilizing Fauld, Erdfelder, Lang, and Buchner's (2007) GPower program for the social, behavioral and biomedical sciences. This program assessed the ideal sample size needed to detect a medium effect of f2 = .15 for the interaction effects, as recommended by Cohen (1992). A sample size of 116 was calculated to detect a significant effect size with a power of .90, alpha of .05, and a medium effect size of .15. This size was sufficient to adequately test for the individual moderation effects of family support, political beliefs, religious beliefs, and will to survive (MOS items) on the relationship between CTE and PTSD. A Bonferroni

adjustment, for multiple-comparison corrections, was performed and determined to be 0.0125, using the .05 p-value.

Participant characteristics (age, gender, ethnicity, country of origin, marital status, and educational attainment) were analyzed using descriptive statistics, including frequencies, measures of central tendency (i.e., mean, mode, median), standard deviations, and quartile ranges. Responses on the CAPS-2 and TSS were analyzed as interval data, while the MOS was analyzed as dichotomous and interval variables. The association between torture exposure and PTSD symptom severity was analyzed using Pearson/Point-biserial correlations.

Hierarchical multiple regression was performed to test the moderating effect of family support, religious beliefs, political beliefs, and the will to survive on the relationship between CTE and PTSD symptoms. According to Leech, Barrett, and Morgan (2011), this level of analyses is most appropriate when the relationship between the predictor and dependent variables are linear, and errors or residuals are normally distributed and uncorrelated with the predictors. For the present study, four separate regression analyses were conducted to determine the main and interaction effects of the predictor (CTE) and each of the hypothesized moderators (family support, religious beliefs, political beliefs, and will to survive) on PTSD symptoms. CTE and each of the moderators were entered into the first block. To reduce multicollinearity, CTE and the moderator variables were standardized into z-scores. Interaction terms were then created by taking the product of CTE and each of the moderators. The interaction terms were entered into the second block of the model to determine whether the interaction accounted for significant variation in PTSD symptoms. Figures 1-4 graphically depict the

hypothesized moderator models. According to Baron and Kenny (1986), when the effect of the independent variable and moderator variable are controlled, a significant interaction effect suggests a significant moderation. Only significant interactions were interpreted. All analyses were conducted between June and August 2012 using IBM SPSS Statistics 20.

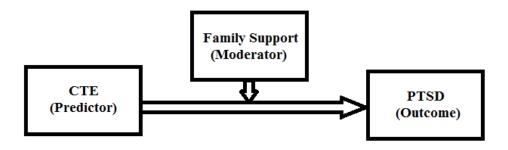


Figure 1. Family Support as Moderator

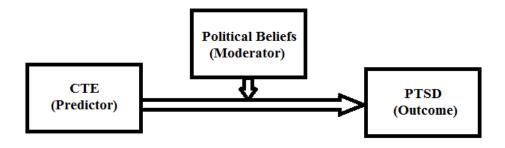


Figure 2. Political Beliefs as Moderator

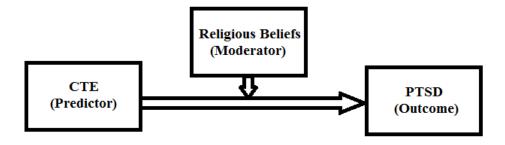


Figure 3. Religious Beliefs as Moderator

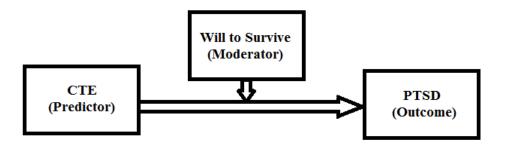


Figure 4. Will to Survive as Moderator

Results

Demographic Variables

All study participants were torture survivors who presented for services at a resettlement agency located in the Midwest. Ninety-five percent of the sample were refugees, and the remaining 5% consisted of asylees and U.S. citizens. Refugees are persons who are outside their country of national origin and are unable or unwilling to return due to a well-founded fear of persecution, for reasons of race, religion, nationality, social group or political opinion (UNHCR, 1951). The mean age for participants was 38.55 (SD = 11.59) years with a median of 37.5. All participants ranged between the ages of 18 to 76 years. Fifty-seven percent of the sample was male and 43% female and 65% were married. A majority of the participants self-identified as originating from Southeast Asia (47%), while the remaining represented countries in other regions of the world (25% Middle Eastern, 23% African, 2% Asian, 2% Caribbean, and less than 1% European and South American). Forty-five percent of those who disclosed their educational attainment had primary school education or less (n = 97). Information on participant characteristics is found on Table 1.

Table 1.

Participant Demographic Characteristics Age	Frequency	%
18-25	48	7 0 14.7
26-35	87	26.7
36-45	112	34.4
46-55	51	15.6
56-65	22	6.7
66+	6	1.8
Gender		
Female	140	43
Male	186	57
Marital Status		
Single, never married	52	16
Married, living with spouse	212	65
Married, with spouse in native country	20	6
Divorced	7	2
Widowed	26	8
Spouse missing after displacement	7	2
Separated	1	<1
Cohabitating	1	<1
Educational Attainment		
No education	11	5
Primary school	86	40
Secondary school	60	28
Secondary school	58	27
*111 participants did not respond to item.		
Ethnicity		
Southeast Asian	153	47
Middle Eastern	82	25
African	75	23
Asian	7	2
Caribbean	7	2
European	1	<1
South American	1	<1

Descriptive Statistics

The MOS was used to measure the types of coping processes utilized during a subject's exposure to torture. These processes include religious beliefs, family support,

political beliefs and having the will to survive. Responses for each variable were coded either a "0" for "not utilized" or "1" for utilized. The mean number of processes reported was 1.5 (SD = .98). Fifty-one percent of the sample endorsed 2 or more of the items as means of survival. Consistent with the literature, religious beliefs were the most commonly reported strategy used to cope with torture (69%, n = 224), followed by family support (52%, n = 169), and will to survive (24%, n = 79). Contrary to the literature (Brune et al., 2002), political beliefs were utilized by the least amount of refugees in this sample (2%, n = 7).

The TSS was used to examine participants' self-reported cumulative torture experiences (the number of varying types of torture methods they endured). Responses were grouped into six subcategories (i.e., witness torture, physical torture, sexual torture, loss control of basic life routine, aggressive environmental control, and formal accusation). The sum of torture methods endorsed was used to calculate CTE score. The mean exposure to torture methods was 2.6 (SD = 2.2). Forty-five percent of the sample reported that they endured four or more different types of torture methods (n = 147). Table 2. shows the most frequent torture events reported.

Table 2.

Torture Types Reported	
Subcategories	%
Witness torture	59.5
Physical torture	56.4
Sexual torture	36.5
Loss control of basic life routine	45.4
Aggressive environmental control	31.6
Formal accusation	30.4

The CAPS-2 was used to assess PTSD symptoms about study participants. CAPS-2 consists of four subscales designed to measure re-experiencing, avoidance, arousal, and dissociation/numbness (Weathers, Keane, & Davidson, 2001). A cut-off score of 26 was sufficient for clinically significant levels of post-trauma symptoms. Twenty-three percent (n = 74) of the sample reported clinically significant levels of PTSD symptoms. This prevalence is consistent with previous research findings of 16-37% PTSD diagnoses among refugee torture survivors (Jaranson et al., 2004).

Prediction and Association

As argued by Baron and Kenny (1986), when testing a moderator model the relationship between the moderating variable and both the independent and dependent variables must not be correlated above .80. This allows for a clear interpretation of the interaction terms. Correlations between CTE, each of the MOS items (family support, religious beliefs, political beliefs, and will to survive), and PTSD were analyzed in Table 3. The predictor and dependent variables were positively, though weakly, correlated, indicating that greater exposure to cumulative torture is associated with greater PTSD symptoms (r[2] = .18, p<.01). Weak positive correlations that were statistically significant were also found between PTSD and political beliefs (r[2] = .13, p<.05), PTSD and will to survive (r[2] = .141, p<.05), religious beliefs and will to survive (r[2] = .15, p<.01), and family support and will to survive (r[2] = .130, p<.05). Moderate positive correlations that were statistically significant were found between religious beliefs and family support (r[2] = .33, p<.01), and between will to survive and cumulative torture (r[2] = .31, p<.01).

Table 3.							
Correlations between IV, DV, moderators	1	2	3	4	5	6	
1. Posttraumatic Stress Disorder	1	.177**	.054	.051	.131	.141	
2. Cumulative Torture Experiences		1	.099	.029	.091	.314**	
3. Religious beliefs			1	.329**	.009	.150**	
4. Family support				1	.100	.130*	
5. Political beliefs					1	.064	
6. Will to survive						1	

^{**}Correlation significant at the .01 level

Each of the four means of survival items (i.e., family support, religious beliefs, political beliefs, and will to survive) was tested separately as a moderator of the association between torture (CTE) and trauma symptoms (PTSD). Hierarchical regression analyses were performed to examine the significance of these moderators. The assumptions of linearity, normally distributed errors, and uncorrelated errors were checked and met. Interaction terms were created by calculating the product of each moderator with the independent variable (FAMSUP x CTE; RELBEL x CTE, POLIBEL x CTE; and WILL x CTE).

Results of the first regression analyses demonstrated that CTE (b=.12, p=.035) and political beliefs (b=.17, p=.002) were significant predictors of PTSD symptoms in this sample, $R^2 = .039$; F (2,323) = 7.55, p=.001. An examination of the moderating effect of political beliefs revealed that the interaction term (POLIBELxCTE) did not account for significant variation in PTSD symptoms, ΔR^2 =.006; F (3,322) =5.72, p = .001. Political beliefs did not moderate the relationship between cumulative torture experiences and post-trauma symptoms.

The second regression analyses demonstrated that CTE and family support together predicted PTSD symptoms, $R^2 = .028$, F (2,323) =5.60, p=.004. Only 2.8% of

^{*}Correlation significant at the .05 level

the variance in post-trauma symptoms can be explained by these variables. However, only CTE significantly contributed to the prediction model (b=.18, p=.001). The test for the moderating effect of family support revealed that the interaction terms (FAMSUPxCTE) did not account for significant variation in PTSD symptoms, ΔR^2 =.004; F (3,322) = 4.23, p = .006. Family support did not moderate the relationship between cumulative torture experiences and posttrauma symptoms.

Results of the third regression analyses showed that CTE and religious beliefs together significantly predicted PTSD symptoms, R^2 = .027, F(2,323) = 5.47, p= .005. However, only CTE significantly contributed to the prediction (b=.17, p=.002). The test for moderation revealed that the interaction terms (RELBELxCTE) did not account for significant variation in PTSD symptoms, ΔR^2 =.000; F(3,322) =3.664, p=.013. Religious beliefs did not moderate the relationship between cumulative torture experiences and posttrauma symptoms.

The final regression analyses revealed that CTE and will to survive together significantly predicted PTSD symptoms, R^2 = .034; F (2,323) = 6.64, p=.001. Again, only CTE was found to significantly contribute to the prediction model (b=.15, p=.001). The test for moderation revealed that the interaction terms (WILLxCTE) did not account for significant variation in PTSD symptoms, ΔR^2 =.003), F (3,322) = 4.80, p=.003. Will to survive did not moderate the relationship between cumulative torture experiences and post-trauma symptoms.

Discussion

The present study is the first of its kind to explore the moderating role of family support, political beliefs, will to survive, and political beliefs on the relationship between

exposure to varying torture types and posttraumatic stress reactions among refugee torture survivors. Findings confirmed the results of previous research by demonstrating the significant effect of cumulative torture experience on posttraumatic stress symptoms (Mollica et al., 1998). Results indicate that greater exposure to cumulative torture experiences (i.e., the number of varying types of torture endured by victims) is significantly, though weakly, associated with greater posttraumatic stress symptoms among this sample of refugee torture survivors. The present findings suggest that an examination of the cumulative effects of multiple exposures to torture is worth consideration in the development of treatment interventions for this unique population. As with Mollica and colleagues' (1998) study among tortured refugees, findings suggest that exposure to cumulative torture may play a role in the development of psychiatric symptoms. They found negative correlation between torture and re-experiencing and dissociation. Hence, a thorough evaluation of a refugee's torture history should include an assessment of the varying types of torture, in addition to the degree and duration.

It is worth noting that 23% (n = 74) of the sample endorsed clinically significant levels of PTSD symptoms. This prevalence is consistent with previous research findings of 16-37% PTSD diagnoses among refugee torture survivors (de Jong et al., 2001). The high incidence of PTSD in the present sample must be interpreted in light of prior findings that refugees are reluctant to disclose such experiences due to feelings of shame, distrust, guilt, stigma, and fear of legal consequences for themselves or families (Blaz-Kapusta, 2008; Chester & Holtan, 1992; Chung, 2001; Regel & Berliner, 2007). Considering that a significant number of these traumatized refugees continue to develop PTSD years after exposure to torture, and that symptoms have a significant impact on

their capacity to resettle and integrate into a new society, mental health providers must be knowledgeable and skilled in identifying and assessing the risk factors involved in the development of posttraumatic stress reactions in this population (UNHCR, 2008; Grodin et al., 2008; Kanninen et al., 2002).

The results of correlational tests revealed that greater exposure to cumulative torture was positively associated with greater PTSD symptoms. This supports the findings of prior studies on the dose-effect relationship between torture and poor mental health outcomes among refugees (Hollifield, Warner, & Westermeyer, 2011; Mollica et al., 1998). It was also found that having the will to survive was significantly correlated with greater endorsement of family support and exposure to different torture methods. These results may suggest that as victims are exposed to higher levels of torture, they rely on a greater diversity of coping processes to ameliorate their mounting distress. This complex interplay between torture exposure, trauma symptoms, and coping supports is consistent with Emmelcamp and colleagues' (2002) assertion that greater endorsement of coping strategies are positively associated with psychological distress (i.e., depression, anxiety, and somatic complaints). No moderating relationship was found for the MOS items (i.e., family support, religious beliefs, political beliefs, and the will to survive), with the relationship between torture exposure and PTSD. The lack of significant findings may be due, in part, to the use of the MOS items to capture coping processes utilized by subjects. A more validated instrument may have served as a better measure of this construct.

Although study data yielded some statistically significant results, it has several limitations and methodological flaws that compromise the utility of findings. The first

limitation involves the cross-sectional design of the study. Cross-sectional designs are limiting, because they make it more difficult to establish causal relationships from observational data. Additionally, the nonrandom recruitment of participants from a refugee resettlement agency weakens the generalizability of study findings. Convenience sampling may introduce selection bias (i.e., differences may exist between those who present for services and those who do not). There is also the possibility that social desirability and self-report bias may have influenced participant responses. As noted earlier, refugee torture survivors often grapple with stigma, shame, fear, and survivor's guilt, which has been shown to negatively impact disclosure rates. Participants may have responded to the items according to what they perceived as "socially acceptable" or legally safe responses. In addition, the measure of cumulative torture was not ideal, as it did not allow for the assessment of duration and intensity of torture. Finally, the study instruments were administered in the native language of each participant, introducing the possibility that items were not cross-culturally and conceptually equivalent. One example would be in the interpretation of the words "trauma", "depression", and "anxiety", which do not exist in certain African and Asian languages.

Implications

The present study has several important implications for mental health providers and caseworkers who treat refugees presenting at resettlement agencies. Firstly, the high prevalence of PTSD among this sample suggests that a thorough assessment of torture histories and current psychosocial functioning should be undertaken as a regular part of case management (Goldfeld et al., 1988; Kroll et al., 2011; Punamaki, Qouta, & El Sarraj, 2010). These refugees were greatly symptomatic, but very few have access to

ongoing mental health services. The present study also highlights the importance of examining exposure to varying torture methods as part of a refugee's treatment plan. As demonstrated, the number of different types of torture methods (e.g., starvation, sexual assault, beatings, etc.) is associated with the use of certain coping processes and post-trauma symptoms.

Why some survivors of torture develop PTSD symptoms while others do not continues to elude trauma researchers in the field. Though not fully understood, the present study showed that coping is associated with trauma symptoms among refugee torture survivors. A thorough understanding of a torture survivor's coping efforts may be important in treatment, because these efforts can be directed towards more adaptive ways of dealing with their trauma memories. Study results suggest that the relationship between torture, coping mechanisms, and symptoms is complex and requires further investigation. Future interventions for refugees may benefit from a focus on resiliency-enhancing factors and the effective use of adaptive coping skills among those exposed to multiple tortures.

References

- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- Baron, R., & Kenny, D. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations.

 **Journal of Personality and Social Psychology, 51, 1173-181.
- Basoglu, M., Paker, M., Paker, O., Ozmen, E., Marks, I., Incesu, C., Sahin, D., & Sarimurat, N. (1994). Psychological effects of torture: A comparison of tortured with nontortured political activists in Turkey. *American Journal of Psychiatry*, 151(1), 76-81.
- Berliner, P., Mikkelsen, E.M., Bovbjerg, A., & Wiking, M. (2004). Psychotherapy treatment of torture survivors. *International Journal of Psychosocial Rehabilitation*, 8, 85-96.
- Brune, M., Haasen, C., Krausz, M., YagdiranO., Bustos, E., & Eisenman, D. (2002).

 Belief systems as coping factors for traumatized refugees: A pilot study.

 European Psychiatry, 17, 451-458.
- Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). Hillsdale, NJ: Erlbaum.
- de Jong, J., Komproe, I.H., & Ommeren, M.H. (2001). Lifetime events and posttraumatic stress disorder in 4 postconflict settings. *JAMA*, 286, 555-562.
- Ellis, H., MacDonald, H., Lincoln, A., & Cabral, H. (2008). Mental health of Somali adolescent refugees: The role of trauma, stress, and perceived discrimination. *Journal of Consulting & Clinical Psychology*, 76, 184-193)

- Emmelcamp, J., Komproe, I.H., Van Ommeren, M., & Schagen, S. (2002). The relation between coping, social support and psychological and somatic symptoms among torture survivors in Nepal. *Psychological Medicine*, *32*, 1465-1470.
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, *39*, 175-191.
- Folkman, S., & Lazarus, R.S. (1980). Analysis of coping in a middle-aged community sample. *Journal of Health and Social Behavior*, 21(3), 219-239.
- Ford, J.D., Stockton, B., Kaltman, S., & Green, B.L. (2006). Disorders of Extreme Stress (DESNOS) symptoms are associated with type and severity of interpersonal trauma exposure in a sample of healthy young women. *Journal of Interpersonal Violence*, 21(11), 1399-1416.
- Gerritsen, A., Bramsen, I., Deville, W., van Willigen, L., Hovens, J. & van der Ploeg, H. (2006). Physical and mental health of Afghan, Iranian and Somali asylum seekers and refugees living in the Netherlands. *Social Psychiatry Epidemiology*, 41, 18-26.
- Ghazinour, M., Richter, J., & Eisemann, M. (2003). Personality Related to Coping and Social Support Among Iranian Refugees in Sweden. *The Journal of Nervous & Mental Disease*. 19(9), 595-603.
- Goldfeld, A.E., Mollica, R.F., Pesavento, B.H., Faraone, S.V. (1988). The physical and psychological sequelae, of torture: Symptomatology and diagnosis. *Journal of the American Medical Association*, 259(18), 2725-2729.

- Gong-Guy, E., Cravens, R.B., & Patterson, T.E. (1991). Clinical issues in mental health service delivery to refugees. *American Psychologist*, 46(6), 642-648.
- Gorman, W. (2001). Refugee survivors of torture: Trauma and treatment. *Professional Psychology: Research and Practice*, 32, 443-451.
- Grodin, M.A., Piwowarczyk, L., Fulker, D., Bazazi, A., & Saper, R. (2008). Treating survivors of torture and refugee trauma: A preliminary case series using Qigong an Tai'Chi. *Journal of Alternative & Complementary Medicine*, 14, 801-806
- Hargreaves, S. (2002). A body of evidence: Torture among asylum seekers to the West. *The Lancet*, *359*, 793-794.
- Hollifield, M., Warner, T.D., & Westermeyer, J. (2011). Is torture reliably assessed and a valid indicator of mental health. Journal of Nervous & Mental Disease, 199, 3-10.
- Holmqvist, R., Anderson, K., Anjum, T., & Alinder, B. (2006). Change in self-image and PTSD symptoms in short-term therapies with traumatized refugees.

 *Psychoanalytic Psychotherapy, 20, 251-265.
- Hooberman, J.B., Rosenfeld, B., Lhewa, D., Rasmussen, A., & Keller, A. (2007).

 Classifying the torture experiences of refugees living in the United States. *Journal of Interpersonal Violence*, 22(1), 108-123.
- Jaranson, J.M., Butcher, J., Halcon, L., Johnson, D.R., Robinson, C., Savik, K., Spring,
 M., Westermeyer, J. (2004). Somali and Oromo refugees: Correlates of torture
 and trauma history. *American Journal of Public Health*, 94, 591-598.
- Kanninen, K., Punamaki, R-L., & Qouta, S. (2002). The relation of appraisal, coping efforts, and acuteness of trauma to PTS symptoms among former political prisoners. *Journal of Traumatic Stress*, 15(3), 245-253.

- Kira, I., Templin, T., Lewandowski, L., Clifford, D., Wiencek, P., Hammad, A., Mohanesh, J., & Al-haidar, A. (2006). The effects of torture: Two community studies. *Peace and Conflict: Journal of Peace Psychology*, 12(3), 205-228.
- Kira, I., Lewandowski, L., Templin, T., Ramaswamy, V., Ozkan, B., & Mohanesh, J. (2008). Measuring cumulative trauma dose, types, and profiles using a development-based taxonomy of traumas. *Traumatology*, *14*(2), 62-87.
- Kira, I. (2012). [Means of survival]. Unpublished raw data.
- Kroll, J., Yusuf, A.I., & Fujiwara, K. (2011). Psychoses, PTSD, and depression in Somali refugees in Minnesota. Social Psychiatry and Psychiatric Epidemiology, 46, 481-493.
- Lindencrona, F., Ekblad, S., Hauff, E. (2008). Mental health of recently resettled refugees from the Middle East in Sweden: The impact of pre-resettlement trauma, resettlement stress and capacity to handle stress. *Social Psychiatry and Psychiatric Epidemiology*. *43*,121-131.
- Marotta, S.A. (2003). Unflinching empathy: Counselors and tortured refugees. *Journal of Counseling & Development*, 81, 111-114.
- McColl, H., Higson-Smith, C., Gjerding, S., Omar, M.H., Rahman, B.A., Hamed, M., El
 Dawla, A.S., Fredericks, M., Paulsen, N., Shabalala, G., Low-Shang, C., Perez,
 F.V., Colin, L.S., Hernandez, A.D., Lavaire, E., Zuniga, A.P., Colidonio, L.,
 Martinez, C.L., Jamei, Y.A, & Awad, Z. (2010). Rehabilitation of torture
 survivors in five countries: Common themes and challenges. *International Journal of Mental Health Systems*, 4,1-10.

- McCullough-Zander, K. & Larson, S. (2004). The fear is still in me: Caring for survivors of torture. *American Journal of Nursing*, 104(10), 54-64.
- Mollica, R., McInnes, K., Pham, T., Smith, M.C., Murphy, E., & Lin, L. (1998). The dose-effect relationships between torture and psychiatric symptoms in Vietnamese ex-political detainees and a comparison group. *Journal of Nervous & Mental Disease*, 186(9), 543-553.
- Newall, M. (2007). Torture victims find U.S. a source of hope and new fears. National Catholic Report, November 9, 2007.
- Olsen, D.R., Montgomery, E., Bojholm, S., & Foldspang, A. (2007). Prevalence of pain in the head, back, and feet of refugees previously exposed to torture: A ten-year follow-up study. *Disability and Rehabilitation*, 29, 163-171.
- Punamaki, R., Qouta, S.R., & El Sarraj, E. (2010). Nature of torture, PTSD, and somatic symptoms among political ex-prisoners. *Journal of Traumatic Stress*, 23, 532-536.
- Quiroga, J. & Jaranson, JM. (2005). Politically-motivated torture and its survivors: A desk study review of the literature. *Journal on Rehabilitation of Torture Victims* and Prevention of Torture, 15, 2-3.
- Sachs, E., Rosenfeld, B., Llewa, D., Rasmussen, A., & Keller, A. (2008). Entering exile:

 Trauma, mental health, and coping among Tibetan refugees arriving in

 Dharamsala, India. *Journal of Traumatic Stress*, 21(2), 199-208.
- Schweitzer, R., Melville, F., Steel, Z., & Lacherez, P. (2006). Trauma, post-migration living difficulties, and social support as predictors of psychological adjustment in

- resettled Sudanese refugees. *Australian and New Zealand Journal of Psychiatry*, 40, 179-187.
- Shrestha, N.M., Sharma, B., Ommeron, M.V., Regmi, S.R., Makaju, R., Komproe, I., Shrestha, G.B., & de Jong, J. (1998). Impact of torture on refugees displaced within the developing world: Symptomatology among Bhutanese refugees in Nepal. *Journal of the American Medical Association*, 290(5), 443-448.
- Stage, F.K., Carter, H.C., & Nora, A. (2004). Path analysis: An introduction and analysis of a decade of research. *Journal of Educational Research*, 98(1), 5-12.
- Steel, Z., Chey, T., Silove, D., Marnane, C., Bryant, R.A., & Van Ommeren, M. (2009).
 Association of torture and other potentially traumatic events with mental health outcomes among populations exposed to mass conflict and displacement: A systematic review and meta-analysis. *Journal of the American Medical Association*, 302(5), 537-549.
- Thapa, S.B., Van Ommeren, M., Sharma, B., de Jong, J., Hauff, E. (2003). Psychiatric disability among tortured Bhutanese Refugees in Nepal. *American Journal of Psychiatry*, 160, 2032-2037.
- United Nations High Commissioner for Refugees. (1951). Convention and Protocol Related to the Status of Refugees. *General Provisions*, January 1967, 14-16.
- United Nations Convention against Torture. (1985). Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment, December 1984.
- United Nations High Commissioner for Refugees. (2008). Refugees, Asylum-Seekers, Returnees, Internally-Displaced, and Stateless Persons. 2007 Global Trends, June 2008, 1-21.

- United Nations High Commissioner for Refugees. (2010). Refugees, Asylum-Seekers, Returnees, Internally-Displaced, and Stateless Persons. 2009 Global Trends, June 2010, 1-30.
- Van der Kolk, B.A. & McFarlane, A.C. (1996). The black hole of trauma. In B.A. van der Kolk, A.C. McFarlane, & L. Weisaeth (Eds.), *Traumatic stress: The effects of overwhelming experience on mind, body, and society* (pp. 3-23). New York, NY: The Guilford Press.
- Weathers, F.W, Keane, T.M., & Davidson, J.R.T. (2001). Clinician-Administered PTSD Scale: A review of the first ten years of research. *Depression and Anxiety*, *13*, 132-156.
- Wenk-Ansohn, M. (2007). Treatment of torture survivors Influences of the exile situation on the course of the traumatic process and therapeutic possibilities.

 Torture, 17, 88-95.
- Zautra, A., Wrabetz, A. (1991). Coping Success and its Relationship to PsychologicalDistress for Older Adults. *Journal of Personality and Social Psychology*, 61 (5), 801-810.

Case Number

Mobile: (____) ____ ____

Place Sticker Here

APPENDIXES

APPENDIX A

DEKALB COUNTY BOARD OF HEALTH CENTER FOR TRAUMA AND TORTURE SURVIVORS (CTTS) INTAKE FOR PRIMARY TORTURE SURVIVOR

☐ In QS ☐ Consent for Treatment ☐ HIPAA In CTTS Database Eligibility Checklist Release of Information Date of Intake _____ Client Name: _____ Date of Birth _____ Age Now ___ Country of Origin _____ Gender: Male **Female Date Enrolled in Program** PRIMARY SURVIVOR SECONDARY SURVIVOR Circle one of these **DEMOGRAPHICS & BACKGROUND Referral Source Contact Information** 1 Referred by (circle) Self Organization: Family or ethnic community Attorney Person Name: Non-governmental organization Religious organization Phone: (___) __________ Physician or health care provider Mental health provider DeKalb County Board of Health School or university Other CTTS client **Patient's Contact Information** CTTS sub-contractor Name of apartments: Refugee Health DCBOH Other _____ Address: 1.1.1 Health Insurance 1. None 2. Medicaid Home: (____) ____ 3. Medicare 4. Group 5. Disability 6. _____ Work: (____) ____

Food Stamps Yes No TANF Yes No 1.1.2 Geographical Area of Origin 1. Asia 2. Australia 3 Central America 4. Caribbean 5. Europe 6. Middle East 7. North Africa 8. Sub-Saharan Africa 9. North America 10. South America							
1.1.3 Marital Status							
 Married & together now							
1.1.4 Number of Childre	en:						
1. Total: # Natural _ # Males		-			# Dead	# Missin	ng
Age Name : A Child	live D	ead M			m Here Now	Male Fe	male
Child							
Child							
Child							
Child							
Child							
Child							
Child							
Child							
Child							
Child							
1.1.5 Date of Arrival: m. 1.1.6 Current Immigration 1.No documents 2.Refugee	•		/				

3.Asylee
4. Asylum seeker
5.US Citizen/Perm.Res.
6.Student Visa
7.Tourist Visa
8. Withholding remov
9. TPS
10.Other
1.1.7 Work Authorization: 1. No 2. Yes 1.1.8 Total Years of Education: years in 1.1.15 (country)
1.1.9 Highest Level of Education Completed:
☐1. Primary School ☐ 2. High or Secondary School ☐ 3. College
4. Post-Graduate 5. Technical Vocational School 6. None
1.1.10 Occupation:
1. Highest occupation held in country of origin:
HURIDOCS code for highest occupation held in country of origin.
2. In the US: Average Monthly Income After Taxes: \$
HURIDOCS code. Name of employer
1.1.11 Participating in ESL now? □1. Yes □ 2. No
1.1.12 Command of English Language: Interpreter needed during interview? Yes No
$\overline{0}$ = None
Name of Interpreter Used
1 = Great difficulty, single words
2= Some difficulty, construct sentences
3= Fluent
1.1.13a Other languages spoken:
0 1 2 3
1. Speaks
2. Reads
3. Writes
1.1.13b Other languages spoken:
0 1 2 3
1. Speaks
2. Reads

3. Writes
1.1.14 Religious Preference:
 □ 1. Protestant □ 2. Catholic □ 3. Orthodox □ 4. Jewish □ 5. Buddhist □ 6. Hindu □ 7. Muslim Sunni □ 8. Muslim Shiite □ 9. Other □ 1. Devish □ 5. Buddhist □ 6. Devish □ 6. Devish □ 7. Muslim Sunni □ 8. Muslim Shiite □ 9. Other □ 9.
1.1.15 Practice Religion:
Before Trauma: 1. No 2. Yes After Trauma: 1. No 2. Yes
Notes: Expresses anger with God/Allah Do not express anger with God/ Allah Accept and satisfied with his destiny 1.1.16 Who lives with client in the household now? List nome and relationship to
1.1.16 Who lives with client in the household now? List name and relationship to client.
Name Relationship 1
1.1.17 Current Living Situation:
1.Owns 2.Rents 3.Hotel 4. Shelter 5.Other
1.1.18 Living situation is:
☐ 1. Stable ☐ 2. Not Stable (Can you stay there as long as you want to? Do you feel secure?)
1.1.19 Do you feel safe at home and the community you live in? (Is there crime there? Risk of fire? Robbers?)

☐ 1. Very Safe Error! Bookmark not defined. 2. Safe Error! Bookmark not defined. Error! Bookmark not defined. 3. Not safe. Error! Bookmark not defined. 4. Dangerous						
1.1.20 Do House	mates kn	ow about	the torture h	nistory?		
Error! Bookmark not defined. 1. Yes, they know about the torture. 2. No, they do not know. 3. Some know; some do not.						
. 4. Yes, but do Notes:	not knov	v details.	5. Not ap	oplicable.		
1.1.21 Chronolog	gy of Tra	vel to the	US:			
Count	try		Date Left	Why did you	leave?	
Country of Origin						
2 nd country						
3 rd country						
1.1.22 Whereabo	outs of In	nmediate I	Family Mem	bers:		
Relationship	Dead	Missing	Prison	Left behind	With	client
Mother						
Father						
Wife /Husband 1 Wife /Husband 2 Wife /Husband3 Wife /Husband 4						
Siblings Age						MI E
Sibling1						Male Female
Sibling2						
Sibling3						

Sibling	g4						
Sibling	g5						
Sibling	g6						
{Child	{Children already accounted for on Page 2}						
1.1.23	Survivor S	tatus					
Pri	imary Survi	vor		Seconda	ary Survivor		
1.1.24	Ethnic Gr	oup Aff	iliation: _				_
SOCIA	AL SECUR	ITY NU	JMBER: _				
Does c	lient have a	Georgia	a driver's li	cense? Ye	s No (circ	ele one)	
Does client have a Georgia driver's license? Yes No (circle one) 1.2 TRAUMA HISTORY							
			1.2	IKAUMA	IIIOIOKI		
1.2.1	Reasons for persecution		ecution (M	Aark all t	hat apply.)	Write the re	ason for the
_			ecution (M	Aark all t	hat apply.)	Write the re	ason for the
<u> </u>	persecutio		ecution (M	Aark all t	hat apply.)	Write the re	ason for the
□ 1.□ 2.	<pre>persecutio Politics</pre>		ecution (M	Aark all t	hat apply.)	Write the re	ason for the
□ 1.□ 2.□ 3.	persecutio Politics Religion	n in the	ecution (M	Aark all t	hat apply.)	Write the re	ason for the
□ 1.□ 2.□ 3.□ 4.	persecution Politics Religion Ethnicity	n in the	ecution (Me client's ov	Aark all t	hat apply.)	Write the re	ason for the
 □ 1. □ 2. □ 3. □ 4. □ 5. 	persecution Politics Religion Ethnicity Humanitari	n in the	ecution (Me client's ov	Aark all t	hat apply.)	Write the re	ason for the
 □ 1. □ 2. □ 3. □ 4. □ 5. □ 6. 	persecution Politics Religion Ethnicity Humanitari Relative of	an Worl	ecution (Macclient's ov	Aark all t	hat apply.)	Write the re	eason for the
 □ 1. □ 2. □ 3. □ 4. □ 5. □ 6. □ 7. 	persecution Politics Religion Ethnicity Humanitari Relative of Gender	an Worl	ecution (Macclient's ov	Aark all t	hat apply.)	Write the re	ason for the

10. Spoke out Against Government						
11. Genocide						
HURIDOCS code(s) for victim characteristics.						
1.2.2 Family Member Harassed 1. Spouse/ Sig. Other	rs Affected by Imprisoned			appeared	Sev. emot. hurt	
2. Children						
3. Siblings						
4. Aunts/ Uncles/ Cousins						
5. Parents/ Grand Parents						
6. Friends/ Acquaintances						
recollection of the tortur	NOTE: The Torture Documentation should be a complete representation of the client's best recollection of the torture experience. A personal statement should be attached to this list of abuses and deprivations. TORTURE DOCUMENTATION					
1.2.3 Torture Story: W	hat happened	l in Client's	words?			

	Event 1: Country		Event 2: Countr	y
Dates from & to	FromTo		From	to
	1010		Date	Date
	Date Dat	۵	Daic	Dan
Place where event	1. Police station	e .	Police station	
	2. Military camp		2. Military camp	
occurred, include city if known	3.Jail/Detention		3.Jail/Detention	
KIIOWII	4.In a car 5.Home		4.In a car 5.Home	
	6.Street/Road		6.Street/Road	
	7.Unknown place		7.Unknown place	
	8.Work 9.Healthcare facility		8. Work 9. Healthcare facility	
	10.School		10.School	
	Other:		Other:	
Duration:				
(hours/days)				
Beaten #				
(Object used)				
Stabbed				
(Object used) Suspended				
1.Upside down 2.Upright				
Gunshot				
Electric shocks				
Shackled,				
Handcuffed				
Smothered				
Burned (how)				
Forced Experiments				
Crushing Injury				
Amputations				
(which)				
Stretch body parts				
(which)				
Exposure to:				
1.Heat				
2.Cold				
3.Chemicals				
4.Drugs				
Walk on knees				
Machines				
Forced labor				
(how)				

1.2.5 Forms of Psychological Abuse that Client Endured:

	Event 1	Event 2	
See dead bodies			
See/Hear Torture			
See Rapes			
See Killings (family?)			
Forced to Accuse Others			
Forced to Confess			
Re-education			
Threatened			
Threatened Relatives			
Threat of Death			
See Mock Executions			
False Accusations			
Constant Noises			
Exposed to Lights			
Solitary Confinement			
Had a Trial			
Heard Formal Accusations			
Forced to Sign Papers			
Forced to Commit Atrocities			

1.2.6	List of	her traumation	life	experiences	(such	as	natural	disasters,	death	of	parents,
domes	stic viole	ence, and trai	ımas (experienced	before	or	after th	e torture o	r now)		
	a.	Before the t	orture	:							

b.	After the torture:	
c.	Now:	

1.2.7 Forms of Sexual Abuse that Client Endured:

	Event 1	Event 2
Rape		
1. Anal		
2.Vaginal		
Was nude		
Sexual Humiliation		
Genital Trauma		

Sexual	
Instrumentation	
Beatings on genitals	
Electrodes	
Suspended by testicles	
Penis intrusion	

1.2.8 Prison Conditions that Client Endured:

	Event 1	Event 2
DEPRIVED OF:		
Water		
Light		
Toilet		
Bath		
Sleep		
Medical Care		
Communication		
Food		
CONDITIONS		
Bed or Mattress		
Climate control		
Able to stand/sit		
Window		
Cellmates (number)		
RELEASED		
AFTER:		
Will of Torturer		
Cooperation with		
Torturer		
Religious Org		
Human Rights		
Organization		
Attorney		
Relatives		
Friends		
Foreign Gov't		
Government		
Official		
Escaped		
Bribed Guards		

"How did you get out of prison?" Please write the cla own words.	ient's "escape s	story" in his/her
1.2.9 Did Client Receive Threats by:		
☐ 1. Phone ☐ 2. Letters ☐ 3. E-Mail ☐	4. In Person	5. Other
1.2.10 Where did Client Receive the Threats:		
☐ 1. At home ☐ 2. On the street ☐ 3. At work ☐	4. While detair	ned 5. Other
1.2.11 Did the Client Experience Any of the Follo	wing? 1. Yes	2. No
a. Lived in hiding, clandestinely, or underground?		
b. Lost socioeconomic status?		
c. Witnessed torture/rape/or murder of family?		
d. Saw property destroyed?		
e. Property Confiscated?		
f. A health care professional helped torture him/her?		
g. Stop going to school?		
h. Lost job?		
i. Prison torture?		
j. Separated from all family members?		
k. Forced to commit atrocities?		

l. Long-term imprisor	nment?							
m. Forced by authoritie	es to leave the country?							
n. Escaped the country	to protect myself or family?							
o. Other								
1.2.12 Means of Sur	vival:							
1. Religious beliefs	5. Luck, chance, fate	☐ 9. Coo	operation					
w/torturers 2. Family Support	6. Desire for revenge	☐ 10. De	ception of					
torturers, tricks 3. Political beliefs	7. Humor, irony	☐ 11. Em	notional distancing,					
dissoc 4. Will to survive 13. Forgiveness. tribe support. 16. Other	8. Cellmates 14. Don't know		ysical exercise mmunity, party or					
NEXT STEP: Comprehensive Strength and Need Assessment.								
Client's Signature:								
Case Manager/ Intake Person Signature:								
Coordinator/ Supervisor Signature								

APPENDIX B

Clinician-Administered PTSD Scale - 2

Below are some statements regarding how you may have felt and acted **during the past week.** Please circle the number for each statement to indicate how often that feeling or behavior has occurred.

Use the following scale:

0 =not at all 1 =only once/week 2= 2 or 3 times/week 3= 4 or 5 times/week 4 = about once/day 5= More than once/day

	not at all أبدا	Once during the week مرة خلال	2-3 times in the week عرات 3-2 في الاسبوع	4-5 times in the week مرات 4-5 مرات في الاسبوع	مرةفي	more than once a day اکثر من مرة في
1) Bad dreams or nightmares.						
2) Being especially alert or watchful, when there was actually no need to be on guard.						
3) Feeling in daze.						
4) Flashbacks of past unpleasant events.						
5) Unexpected or disturbing memories.						
6) Feeling as my emotions were shut down or blunted.						
7) Working hard to block out certain memories.						
8) Violent dream.						
9) Trying to avoid reminders of painful past events.						
10) Checking to see that I was safe.						
11) Jumping or being very frightened by sudden loud noises.						
12) Acting or feeling as if I were re- experiencing some painful past events						

13) Distress caused by reminders of a			
painful past event			
14) Efforts to avoid reminders of a			
painful past events.			
15) Feeling in danger.			
16) Feeling out of touch with my			
surrounding.			
17) Feeling that things going on around			
me were strange, unfamiliar or not			
quite real.			
18) Feeling as if I am watching myself			
from outside my body.			