LONG-TERM IMPACT OF MASS TRAUMA

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Exploring Long-Term Impact of Mass Trauma on Physical Health, Coping, and Meaning:
An Examination of the Ottoman Turkish Genocide of the Armenians

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the cover of World War I, Turkish armed forces systematically moved to exterminate Turkey's Armenian population.

The present study focuses on how Armenian survivors dealt with the Genocide, what gave them the strength to cope, their level of post-traumatic stress disorder (PTSD), the extent of physical symptomatology, and meanings associated with the trauma, as manifested in selected aspects of survival accounts from 16 Armenian Americans (born before 1917) who had witnessed the Ottoman Turkish Genocide of the Armenians.

Preliminary findings indicate that although these survivors had adjusted and prospered in the American life, some levels of PTSD persisted. Those who found a positive meaning in their experiences have coped better, and their level of PTSD and physical symptomatology was lower. This research venture is a follow-up to the study in which Armenian survivors' coping styles and patterns were examined after eight decades. The study revealed that against the backdrop of losses and atrocities outside the scope of conventional life experience, these aged survivors reflected a sense of accomplishment tempered with anger about the perpetrators' denial of how they were victimized.

Introduction

Although genocides have been perpetrated for several centuries, it was not until 1948, in response to the Jewish Holocaust, that the United Nations Convention on Genocide made genocide a "crime under international law" (Universal Declaration of Human Rights, 2000-2008). Retrospectively, genocide should have been recognized earlier by the world at large. Genocide is still going on today as the authors write this paper. One reason for the growing attention to genocide is the ongoing genocide in Sudan against the people of Darfur. This genocide began in 2003, and has taken at least 1,000,000 lives and displaced 2.3 million people. Educators are relinquishing the mantra "Never Again" and embracing the realization that genocide has not stopped happening. An additional goal of this research is to educate young people about patterns of genocide and how it occurs, so that there is a

chance for prevention. The authors' goal is to make the genocide in Darfur the last genocide of the 21st century.

Approximately 1.5 million Armenians were massacred from 1915 to 1923 in the Ottoman Turkish Empire at the hands of the Young Turks. Henry Moregenthau, the U.S. Ambassador to the Ottoman Empire at the time, witnessed one of the earliest examples of genocide in the "civilized" world. With the absence of any international law forbidding the *extermination of a race,* Moregenthau was unable to put an end to the Armenian genocide, in spite of several telegrams sent to the U.S. State Department. There were no measures taken by the Ottoman Empire to prevent the genocide, therefore history was bound to repeat itself. Adolph Hitler once said, "Who still talks nowadays of the extermination of the Armenians?" (Armenian National Institute, 1998-2008). Galvanizing support for his "final solution" of the Jewish "problem" in Nazi Germany, Hitler capitalized on the forgotten genocide of the Armenians.

On March 25th, 1915, backed by the ruling Young Turks, Turkish Minister of the Interior, Talaat Pasha, ordered his "final solution" for the Armenians living in Ottoman Turkey: *"The duty of everyone is to effect on the broadest lines possible the realization of the noble project of wiping out of existence the well-known elements who for centuries have been the barrier to the empire's progress in civilization"* (The First World War, 2000-2007)

The vernacular of this order offers insight into the intentions, circumstances, and the meaning of the genocide of the Armenians. The Armenians represented a competitive threat and an ethnic problem for the Ottoman Empire as the Empire was shrinking and losing its political stability. The Armenians, the first group to endorse Christianity, clashed with the nationalist Muslim Turks. Long before the Armenian genocide, Armenians represented a colonial threat to Russia in Transcaucasia, and before that they were invaded by Persia. Traditionally Armenians were successful traders who represented a large sector of the bourgeoisie in Russian Transcaucasia. The Russians benefited from and controlled the Armenian trade. The Turks, however, did not care to profit from Armenia's trade; Turks viewed them as a threat. Therefore Turks wanted to eliminate Armenians completely and

expand into the Armenian territories. "The Turks wanted the Armenians out of the way; they also wanted Armenian wealth and were prepared to kill, torture, and maim to get it. Their motives were old; the means to achieve them were new and chilling" (Winter, 2003, pp. 209-210).

By 1914, the combination of Armenian's strong Christian identity, its connection with Russia (whom Turkey had battled with over Armenia), and its overall strong presence in the bourgeoisie prompted the Turks to want to eliminate the perceived Armenian threat. Indeed, Talaat Pasha blamed the Armenians for hindering Turkish expansion. In his orders of deportation, he clearly blamed the Armenians for having been the barrier to the Empire's progress in civilization (reference). The Young Turks would not tolerate a multiethnic empire. In fact, it was the very essence of the Christian Armenian identity that threatened the Turkish Empire. The deportation and killing of 1.5 million Armenians, according to Dadrian (1994), were intended to rid eastern Turkey of an old and prosperous community, whose Armenian residents inspired envy and who were perceived as enemies in time of war. Consequently, when the deportations began, the Turks removed the most influential and powerful male members of the Armenian community ages 18-45, including leaders, clergymen, intellectuals, businessmen, and journalists. The Armenians were feared by the Young Turks for their intellectual and cultural identity, which threatened the Turkish Ottoman Empire.

Christianity was a pivotal part of the Armenian identity; consequently, the perpetrators attacked Armenian Christianity. According to Balakian (2004), when an Armenian woman was given her deceased son's bloody clothes, a Turk took her to a Church—clearly a significant element of the Armenian faith. "In the Church the Turk pointed to the cross and said 'Kneel down and pray. We'll do it to you like you did it to Christ. Hey Mother, pray to your son. Have you no faith in the resurrection?'" Such psychological torment, which so many Armenians faced during the genocide, would haunt survivors for eternity. Balakian, a member of the Armenian Diaspora, reflects on the catastrophic nature of the genocide:

"What did it mean when a people who loved and worked and built a culture on the land where they had lived for three thousand years were destroyed? What did it mean for the culture's legacy? What

did it mean for the human race? When a civilization is erased, there is a new darkness on the earth. I could feel dust blowing over dry land, where now blood is part of the rocks, where the water will never run clean again." (p. 253)

Balakian asks many important questions about the impact of genocide on its survivors. Indeed, the Turks, like all perpetrators, sought to "destroy the victim's sense of autonomy" (Herman, 1997, p. 77). It is imperative to realize and understand the repercussions of eliminating one's autonomy, particularly its psychological ramifications.

In her book, *Trauma and Recovery,* Herman (1997) illustrates the importance of a supportive social environment following mass trauma. In cases of genocide, post-traumatic stress disorder is prevalent in survivors due to a long-term mass trauma generated by witnessing death, destruction, starvation, torture, and forced relocation.

Review of Literature

Throughout the 20th century, genocide has claimed many lives across the world. Eastern European Jews during the holocaust, Armenians during the Ottoman Turkish Empire, and Africans from Rwanda and Sudan are just some of those who have suffered. Government genocidal policies alone have resulted in over 210 million deaths – 80 percent of which were civilian deaths (170 million) – a figure that represent nearly four times the number of individuals killed in combat in international and domestic wars during this same time period (Robinson, 1998; Rummel, 1996). These statistics do not include human rights violations and severely underestimate the additional toll on human life from physical and psychological scarring.

Though less than 10 years old, the 21st century has already demonstrated that it is no more immune or better protected from genocide's deadly wrath. The Darfur area of Sudan is the latest region to host and suffer daily through ethno-politically motivated massacres. While many continue to die, survivors will be forced to manage traumatic effects long after the conflict ends. In spite of this grim reality, psychology is uniquely qualified to address the consequences of these atrocities (Woolf, 2000).

While specific definitions may vary, a common thread among genocides is death and intent to destroy in part or in full an ethnic group (Office of the Higher Commissioner for Human Rights, 2008). Death often results from the physically torturous conditions of exhaustion, starvation, dehydration, and disease (Kalayjian, Shahinian, Gergerian, & Saraydarian, 1996). Clearly, this makes scientific examination of genocide's psychological effects a rather difficult task. Many genocide victims do not survive, and those who do often do not wish to relive their trauma for the purpose of scientific research. In addition to the obvious physical toll, genocide survivors struggle with many lasting psychological effects of their trauma (Kalayjian et al., 1996). In 1995, Athanase Hagengimana administered a survey to Rwandan genocide survivors and found two common constellations of symptoms:

1. Post-traumatic stress disorder (PTSD)

   Ihahamuka, a word the Rwandans created post-genocide, is mainly used for children or people who are easily frightened, have trauma-related nightmares, and often avoid reminders of traumatic events. This applies in the cases of many children and adults who cannot stand seeing soldiers in uniform because they witnessed soldiers murdering their relatives in the 1994 genocide.
2. Chronic traumatic grief

   Traumatic grief was found to be highly prevalent. Since 91 percent of survivors had no chance to bury their relatives or perform mourning ceremonies, this affected the bereavement process. Of interviewed survivors, 88 percent had not yet seen the corpses of their loved ones.

Hagengimana (1995) discovered that survivors' post-genocide habits are called ihahamuka as well. These include antisocial behaviors in young people (e.g., promiscuity in young girls or widows), excessive drinking that was not present before the genocide, and excessive aggression and irritability directed toward anyone. The healing of wounds and justice for survivors seem to be unavoidable requirements for reconciliation.

Schiraldi (2000) refers to PTSD as a normal response by normal people to abnormal situations. While PTSD can follow both natural and human-made disasters, the latter may be more difficult to deal with. Frequently, the perpetrators still live in close proximity to victims – thereby providing constant reminders of the past, as well as the threat for the future. Even if the immediate source of the trauma is removed, time does not necessarily heal all wounds. The survivor may, in fact, continue to suffer, to appear "frozen in time" (Brahm, 2003-2007). Survivor guilt has also been a painful symptom associated with genocides and PTSD (Niederland, 1981). Danieli (1988) has described coping functions for such guilt among Jewish holocaust survivors in the form of commemoration. Survivors' guilt, she posits, preserves loyalty to non-survivors, providing a symbolic cemetery for those who were never allowed a legitimate resting place. Because of the powerful anger created by Turkey's denial, the nature of Armenian survivor guilt is not necessarily the same (Kupelian, Kalayjian, & Kassabian, 1998). Comorbidity commonly accompanies PTSD, as 62 to 92 percent of those suffering from PTSD have a previous or concurrent psychiatric disorder compared to only 15 to 33 percent of non-PTSD comparison groups (Helzer, Robins, & McEvoy, 1987).

In a 1996 study of older adult Armenian genocide survivors, Kalayjian et al. found that the survivors identified destruction of life, physical harm, deportation, pillaging, and loss of status as the main stressors they were forced to endure. The depth of such trauma may have been compounded by the decision of many survivors not to discuss their experiences prior to the study. There is no consensus as to why survivors choose to remain silent. Some suggest this stems from feelings of humiliation, weakness, and fear (Mazor, Gampel, Enright, & Orenstein, 1990). Some others stay silent out of fear of repeated torture (Kalayjian & Shahinian, 1998). Danieli (1982) found that fear and isolation inhibited holocaust survivors' mourning. This is particularly important given the positive correlation between holocaust survivors' ability to communicate their experiences of traumatic events and their post-traumatic health (Cahn 1987). Common coping methods have included religion, family, work, and denial (Kalayjian et al., 1996).

According to Herman (1997), post-traumatic stress commonly manifests itself in three ways:

- First, hyperarousal arises from continual vigilance in hopes that the experience will not occur again.
- Second, the traumatic memory is omnipresent in the mind of the traumatized. The memory repeatedly occurs as a flashback, which can happen at any time, and the victim is unable to distinguish the memory from actually experiencing the event again.
- Third, traumatized individuals appear to be indifferent in order to mask the feelings of vulnerability and helplessness.

Such trauma affects both individuals and communities. An increase in the prevalence of trauma can lead to a decrease of trust within a society. Trauma often spirals out of control in a vicious cycle. Human rights violations create massive trauma, which can, in turn, fuel additional human rights violations, and so on. Feelings of trauma can generate feelings of frustration and revenge, which can produce this cycle of violence and perpetuate feelings of victimhood on all sides of the conflict. Shared trauma generates a "we feeling" but also creates an "us vs. them" mentality (United States Institute of Peace, 2001).

Are men, women and children affected differently? Women are more likely to be left behind after husbands and children are killed in conflict (Kalayjian et al., 1996). Women are often humiliated, feeling that they could do nothing to stop the violence. What is more, the loss of a husband or children can make it difficult for women to provide for their families, thereby adding further humiliation. Children also face particularly difficult trauma. They lack the emotional development and life experience to make sense of the trauma, even more so than adults (Brahm, 2003-2007). Jarman (2001) observes in Chechnya that traumatic events often produce rage in teenagers because their lives have been turned upside down, and they've essentially been robbed of their youth. It is no surprise that children rendered orphans by genocide are often immediately recruited as soldiers.

Survivors' children are susceptible to picking up attitudes from adults in their lives, thereby providing the opportunity for trauma to be transmitted across generations. While parents may

attempt to shield and protect their children from knowledge of the trauma, children who perceive that a parent is incapable of tolerating certain effects will stop experiencing and expressing them, in an attempt to protect the bond with the parent (Kalayjian, 2002).

More than half a century ago, Sullivan emphasized the importance of "validation" of trauma in achieving resolution and closure (Sullivan, 1953). An explicit expression of remorse by a perpetrator to a victim can provide great healing value (Staub, 1990). Denial, on the other hand, perpetuates the trauma, and enables perpetrators to evade the consequences of their actions (Hovannisian, 1987). In the case of the Turks and Armenians, there has never been a formal acknowledgement of genocide made by the Turkish government. Fittingly, Des Pres has referred to the plight of the Armenians as one marked by "permanent loss and the pain of memory mocked by denial" (Des Pres, 1987, p. 17). In addition to the damage such denial causes to the specific victims and their families, it can clearly set a dangerous precedent for future genocidal killing (Smith, Markusen, & Lifton, 1995). The most recent evidence of this is found in the series of genocides that continues to occur in various countries in sub-Saharan Africa. The violence in Darfur is occurring less than a decade after the genocide in its neighbor, Rwanda. It seems genocide can beget genocide. "When the extermination of the Armenians was made negligible, the exterminations of the Holocaust were made possible" (Kupelian et al., 1998, p. 206).

The eight stages of genocide that Stanton (1996) describes are classification, symbolization, dehumanization, organization, polarization, preparation, extermination, and denial. It is through each of these stages that a human population is exterminated. Each of these stages is another layer of foundation that cements the acts of genocide.

The first author of this paper has come up with eight phases of healing from a genocide, which are: acknowledgment, validation, reparation, facing negative feelings (such as anger, fear, shame, and humiliation), facing denial and revisionism, gaining acceptance, forgiveness, discovery of new meaning, lessons learned, and closure (Kalayjian, 2005).

Participants

Participants in this research were older Armenian Americans who were born before 1917, had witnessed the Armenian genocide, and were willing to participate in this research. There were 16 participants (9 female and 7 male). The participants' ages ranged from 79 to 93, with a mean age of 85.3 years. In this group, 50 percent had achieved higher education; 43 percent immigrated to the Unites States between 1912 and 1952; 56 percent had arrived after 1966. All participants had been married, 56 percent had been subsequently widowed, and 87 percent had living children. Occupationally, the largest group (31 percent) had worked in the garment industry (alterations, tailoring, and dressmaking). The second largest group (25 percent) comprised either owners or managers of a business. The third-largest group was composed of housewives (12 percent) and dentists (12 percent). One person was a teacher, another was a pharmacist, and a third was a telephone operator. With regard to religion, 87 percent had an apostolic religious affiliation and 12 percent had a Catholic religious affiliation.

During the period of 1995 to 2005, all participants were interviewed in their own homes in the New York metropolitan area. Some participants' first language was Armenian and they were asked questions and given the instruments in Armenian. The instruments were translated and then translated back.

Procedure

The interview instrument consists of 23 questions aimed at gathering factual demographic data. The interview's duration was from 30 minutes to four hours in length. The Mini-Mental State Exam (MMSE) was given to assess cognitive status and impairment. The instrument assesses orientation, immediate and short-term recall, language, and the ability to follow simple verbal commands. The MMSE has demonstrated validity and reliability in psychiatric, neurological, geriatric, and other medical populations (Folstein, Folstein, & McHugh, 1975). Although the instrument only took about 30 minutes to complete, many survivors wanted to talk for a long time, making the interview last as long as four hours. The Brief Symptom Inventory (BSI) is a 53-item self-reported

symptom inventory designed to reflect the psychological symptom patterns of psychiatric and medical patients as well as community non-patient respondents (Derogatis, 1993). The BSI is a Likert scale that ranges in raw scores from 0 to 212. The raw scores are then converted into T-scores for each scale. This inventory reports a profile of nine primary symptom dimensions and three global indices of distress (Derogatis). The primary symptom dimensions are: 1. Somatization (SOM), 2. Obsessive-Compulsive (O-C), 3. Interpersonal Sensitivity (I-S), 4. Depression (DEP), 5. Anxiety (ANX), 6. Hostility (HOS), 7. Phobic Anxiety (PHOB), 8. Paranoid Ideation, (PAR), 9. Psychoticism (PSY). The participants yielded T-scores in SOM from 41-80, O-C from 38-72, I-S from 38-74, DEP from 41-61, ANX from 38-72, HOS from 39-70, PHOB from 44-72, PAR from 43-80, and PSY from 46-67.
The global indices are: Global Severity Index (GSI), Positive Symptom Total (PST), and Positive Symptom Distress Index (PSDI). The participants yielded T-scores in GSI from 33-73, PST from 30-70, and PSDI from 30-65. This instrument was chosen due to the high reliability of internal consistency. Alpha coefficients for all nine dimensions of BSI ranged from a low .71 on the Psychoticism dimension to a high of .85 on Depression (Derogatis, 1993). The Life Purpose Questionnaire (LPQ) was used to measure an individual's sense of life meaning. It is a questionnaire that produces scores that range from 0 to 20. Scores can range from having no sense of life meaning to a definite sense of life meaning. The participants yielded scores between 13 and 19. The LPQ was chosen because of its test-retest reliability, which resulted in a .90 correlation. In addition, the LPQ items are designed to be more easily understood and completed by some persons (Hutzell, 1987, as cited in Derogatis).

Result

Of the 17 respondents, 59 percent were women with an average age of 86.3. The most common education level was primary school education (44 percent), with the remaining having either middle school (6 percent), high school (25 percent), or a post-secondary degree (25 percent). Most were unemployed at the time of the evaluation (67 percent). With regard to marital status, 41 percent were married at the time of the interview, and the remaining participants were widowed. The most common religion was Apostolic (88 percent) followed by Catholic (12 percent).

1. Gender & PTSD

Men and women did not differ with regard to PTSD in the past or at the time of the interview. Men's past PTSD (M = 11.2) and current PTSD (M = 10.0) was nearly identical to women's past PTSD (M = 11.7) and current PTSD (M = 10.4), t (15) = 0.5, 0.4, *ns*, respectively.

2. PTSD & BSI

In general, higher BSI scores related to greater PTSD. Scores on the BSI overall and GSI were marginally correlated with past PTSD, r (17) = .47, p = .059, and significantly related to current PTSD, r (17) = .67, p = .003.

3. LPQ & PTSD/BSI

Scores on the Life Purpose questionnaire were unrelated to BSI scores, past, or current PTSD, r (17) = -.02, -.04, -.21, all *ns,* respectively.

4. The more countries one was forced to migrate to, the higher levels of PTSD and BSI.

Migration, in terms of the number of countries migrated to, was marginally related to the overall GSI score such that more migration related to lower GSI, r (17) = -.46, p = .061. However migration was unrelated to PTSD, either past or current, and in the LPQ, r (17) = -.14, .01, -.31, all *ns.*

5. The longer a survivor has been in his or her permanent home, the less PTSD and less BSI would be experienced.

Year of entry was unrelated to past and current PTSD, the GSI, and the LPQ, r (17) = .04, -.24, .17, and .15, respectively, all *ns.*

Discussion

It is complicated to study the long-term impact of a mass trauma, such as a genocide that has occurred over 90 years ago, especially since at the time of the genocide and in the years that followed there were limited research findings addressing the psychosocial and spiritual impact of this or any other genocide (since it was the first one recorded in the 20th century). Additionally, participants stated that they had not received mental health or psychological assistance in their lifetime. In looking at the history of psychology and immigrants, there has been a void in areas of

immigrants receiving psychological assistance. This can be due to lack of resources, services, and funds, and the cultural stigma that can go along with receiving psychological assistance. In addition, the Ottoman Turkish Genocide has been denied by both the Turkish and American governments. Survivors could not express their feelings and worked to process their feelings; they were unable to talk about them for at least two decades post-genocide due to fear of continued persecution. This persecution continues even today in Turkey, as well as in America. Hrant Dink, a journalist friend of the first author, was brutally killed on January 19, 2007, by a Turkish extremist, for "insulting Turkishness, and violating Article 301" as per Turkish governmental accusations. In article 301, if anyone talks about his own ethnicity, about genocide, or about the government's human rights violations, he is considered the enemy. Mr. Dink was murdered for his views on human rights and minority rights, and for stating his Armenian identity.

In a previous study with another sample of survivors from the Ottoman Turkish Genocide, Kalayjian et al. (1996) found that survivors did not talk about their feelings until the time of the interview, which was approximately 75 years post-genocide. This interview was initiated by the first author. Survivors expressed fear of further persecution, and kept silent for decades.

The results of this study revealed that a larger percentage (60 percent) of survivors who had talked about their negative experiences with family members had lower levels of PTSD. Although this was in a paraprofessional environment, the survivors felt comfortable enough to share such traumatic memories and experience catharsis. In the process of talking about their trauma they received some validation from their family members, and ultimately began working on gaining meaning from the experience. Communication is significant because it allows people to process their experiences, and would provide an opportunity to discover a new meaning. Establishing communication with people allows survivors to share their stores with others who may have had similar experiences, or with people who could help them process their experiences.

Resilience

Genocide survivors had to create new lives for themselves in their respective new countries in

the Diaspora. The survivors had to compartmentalize their experiences and memories in order to move forward with their lives. They had no opportunities to secure jobs or living quarters in advance of the genocide. They had neither legal papers nor documents from their past lives. The survivors moved forward by placing emphasis on excelling in their current host country and prospering. Their primary focus was survival through work, family, cultural connection through church, and procreation (Kalayjian et al., 1996).

Migration

During the genocide the survivors had no choice but to walk from country to country, until they found a satisfactory situation. In that time period in the Middle East and Europe, these countries were just coming out of World War I. Therefore, these countries were plunged into poverty, and their citizens into economic and emotional depression. These challenges added to the survivors' distress and made the environment unsafe and void of nurturance.

Interviews

The interviews lasted longer than the allocated time for each question. The majority of survivors used the interview time to process unresolved traumatic feelings as they talked about their traumatic memories. In the qualitative portion of the questionnaire, symptoms of PTSD were expressed: extreme distress, crying, sobbing, expression of anger regarding denial, and talking about nightmares and flashbacks they had experienced. The professionals who conducted the interviews spent more time processing and offering coping skills and supportive therapeutic techniques to alleviate survivors' pain and suffering. Survivors were also given personal referrals, and the opportunity to follow up during the subsequent days and weeks.

PTSD and BSI

In general, higher BSI scores related to greater PTSD. Scores on the BSI overall GSI were marginally correlated with past PTSD, r (17) = .47, p = .059, and significantly related to current PTSD, r (17) = .67, p = .003. Research has shown that the body keeps score of the trauma. The body is negatively affected by the trauma.

Scientific research in the past decade reinforced these findings, stating that cells have memory (van der Kolk, 1994). Research findings indicate that when trauma strikes, the immune system becomes occupied by a fight-or-flight response, thus leaving the body with little defense to protect physical health. Therefore, trauma survivors often express more physical symptoms and illnesses such as high blood pressure, ulcers, migraine headaches, backaches, skin problems, and other infections.Genocide survivors can benefit from being mindful of the impact of the trauma on their physical health. If one is unaware of this phenomenon, these physical symptoms may continue manifesting and transmitting to one's emotional and psychological state(van der Kolk).

As indicated in the research conducted by Kolb (1987), excessive stimulation of the central nervous system at the time of the trauma results in permanent neuronal changes that have a negative effect on learning, habituation, stimulus discrimination, and physical symptomatology. The abnormal startle response is characteristic of PTSD symptoms (American Psychiatric Association, 1994). The failure of the ASR abnormal acoustic startle response to have habituated suggests that traumatized people have difficulty in evaluating sensory stimuli and mobilizing appropriate levels of physiological arousal (Shalev & Rogel-Fuchs, 1993). Thus, survivors with PTSD could not properly integrate memories of the genocide trauma; instead, they were mired in the continual reliving of the past and were misinterpreting physiological stimuli as threats.

Genocide as a mass trauma is experienced as an intense level of stress. Intense stress releases endogenous stress-response neurohormones such as catecholamines (e.g., epinephrine, norepinephrine, and serotonin), and hormone of the hypothalamic-pituitary-adrenaline variety, endogenous opiates. These stress hormones help survivors mobilize the energy required to deal with this mass trauma in ways ranging from increased glucose release to enhanced immune function. In a normal, stress-free person, stress produces rapid and effective hormonal responses. However, genocide as a mass trauma causes chronic and persistent stress, which inhibits the effectiveness of the stress response and induces desensitization (Axelrode & Reisine, 1984).

Although there was no statistical relationship discovered among the LPQ, PTSD, and BSI,

anecdotal findings shared by the survivors indicated that those who had resolved their trauma and had achieved a peaceful inner state discovered more meaning in life and found meaning in their daily tasks. Others who had expressed a lot of expectations from the perpetrators and shared high levels of anger and resentment towards the Turkish government were more symptomatic and had less meaning in their lives, and no clear-cut goals in their daily tasks. The latter reinforces a sense of helplessness. Although Sullivan (1953) states that acknowledgment, validation, and reparation are essential for closure for a traumatic experience, in absence of it, one is able to validate oneself and create the peace within by practicing forgiveness (Kalayjian, in press).

Although the authors hypothesized that if survivors had permanent homes and were not forced to migrate from country to country they would score less on BSI, indicating low symptomatology, and low scores on PTSD, the findings revealed the year of entry as well as number of countries forced to immigrate were unrelated to levels of BSI and PTSD. Perhaps when survivors finally immigrated to the United States and felt comfort, financial security and the benefits of a democracy, their arrival may have made the travels worth going through. Since the majority of survivors ended the interview with gratitude and the notion of "God bless America," indicating their level of joy and gratitude.

Limitations

These survivors were children at the time of the genocide, and the interviews took place approximately 70 years after the atrocities.These children suffered throughout their lives without any therapeutic interventions.

The nature of the interview questionnaire elicited traumatic memories; therefore, many survivors did not want to be subjected to the retraumatization inherent in the interview, which resulted in a small sample size. In addition, many survivors' families were not willing to have them participate due to the increase arousal of their parents after such interviews. A daughter of a survivor stated "I know it is for a good cause, but I am the one who will suffer with my mother all night when she is having nightmares and flashbacks after the appointment." This exemplifies the pain of a

severe and long-term unresolved trauma.

Limitations of age, sample size, and having to use a convenience sample (since not enough survivors are living at this time, as the Genocide occurred around 1915), are all limitations to this study.

Recommendation for Further Research

Future research can benefit from focusing on current genocides and their immediate impact on the survivors. Emphasis should be placed on healing interventions, coping strategies, and psychosocial and spiritual rehabilitation.

Most importantly, future research can benefit from studying the creative efforts and therapeutic interventions utilized in conjunction with perpetrators – perhaps then, and only then, can humanity prevent genocides.

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