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STRESS IN REFUGEE SURVIVORS OF STATE TORTURE

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STRESS IN REFUGEE SURVIVORS OF STATE TORTURE

By

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ABSTRACT

STRESS IN REFUGEE SURVIVORS OF STATE TORTURE

By

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The United States has become a place of refuge for large numbers of refugees from Central and South America, many of whom are survivors of torture. These survivors are subject to traumatic stress, in addition to the stress of exile itself. Post-traumatic stress is known to persist for years. This study was undertaken to examine the relationships between stress symptoms and both exposure to torture and time since the trauma occurred.

Male Hispanic refugees completed a questionnaire regarding their current stress levels, their reasons for leaving their homelands, and their experience of torture. Stress was assessed using the Impact of Events Scale. Some refugees were tortured, some experienced specific dangers (e.g., arrest, death threats, arrest of family members or friends), and the remainder experienced the upheaval and violence of political repression or civil war.

The refugees could be classified into one of three recency groups, based upon their length of stay in the U.S.: very recent (under two years), recent (up to 9 1/2 years), and non-recent.

It was hypothesized that stress levels would be higher among the torture survivors than among the others, and that

time would reduce the stress levels among those refugees not exposed to torture, but not among the torture survivors.

In the 3x3 ANOVA design of torture exposure and recency, a main effect was found both for torture exposure and for recency; the interaction was not significant.

Stress levels were high in all three exposure groups among the very recent refugees. Stress levels remained high among recent refugees in the torture and specific danger groups. Among the non-recent refugees, stress levels dropped for the torture-exposed group (and continued dropping for the non-specific danger group), but remained high among the specific-danger group.

Recency was confounded with nationality: recent refugees were exclusively Central American, while long-term refugees tended to be South American. In addition, the South American sample averaged more years of education. Possible effects of this confounding were explored.

It is clear that there is a great and unmet need for mental health services among Hispanic refugees.

Acknowledgments

No major effort, and certainly no dissertation, is the result of just one person. Others--many others--have provided inspiration or encouragement, or have been valuable models. It gives me great pleasure to acknowledge even just a few of those many important people.

The fundamental role of my parents has been paramount; their love and confidence surely started me on this path even before I took my first step, and has sustained me in all the great variety of steps taken since.

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Finally, I gratefully acknowledge the refugees who put aside their fears and suspicions to participate in this study. In particular, I humbly thank the survivors of torture, to whom this work is dedicated. Those undergoing this human horror can but await their fate. It is up to the rest of us to act, psychologically **after** the fact, and politically **before** the fact. Only in this way can we help to renew their dignity, and thereby to reclaim ours.

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Introduction

Torture is a terrible trauma of human design. Its practice is both ancient and current, and widespread (Amnesty International, 1984). There can be no doubt that the survivors of this abuse experience not only physical harm, but significant psychological damage as well. Yet, until recently, the psychological sequelae of torture were little known; even today, what small knowledge exists is known but to a relative few, mostly research and treatment professionals in psychology and medicine.

As a result, relatively few clinical and research reports have been published. The availability to interested parties of even this sparse literature is further narrowed because most psychologists involved in torture research and treatment are European (although some of their papers are published in English).

A sense of the trend in the availability of research on torture is provided by an examination of listings in Psychological Abstracts. Previous to 1987, torture was not an indexed item in the Abstracts. The number of articles referenced under this heading in each of the three years 1987, 1988 and 1989 are 4, 6 and 6, respectively. In fact, according to the editor of the Abstracts (A. Walker, Jr., personal communication, August, 1991), for some time there was resistance to introducing torture as a new index item in the Abstracts, where it had been subsumed under the index persecution, because it was felt that torture was not

sufficiently addressed in the literature to merit its separate listing.

It is necessary that this unpleasant topic be brought to the scrutiny of psychologists. Clinical psychologists traditionally have not been afraid to venture into dark and impolite areas in search of the meaning of psychological experience. Indeed, Freud opened up the field of psychology by following his clinical data into sexual areas the discussion of which was fiercely resisted, the study of sexuality being seen as taboo and unseemly. Now it is time once again to confront another taboo, and open ourselves to a most resistible and unpleasant area of human conduct; the need is great, and growing.

Torture has been surprisingly widespread in the history of Europe and the Americas, and is notable for its formal inclusion in the European legal system, codified like any other aspect of trial procedure. Despite its gradual abolition from the justice system following the Enlightenment, it continues today outside the courtroom but within the halls of government, now primarily as a tool of government coercion. The threat or use of torture by governments contributes to the tremendous number of refugees that exist worldwide.

In psychology, the concept of stress, and in particular stress following trauma, is clearly relevant to this issue. The understanding of traumatic stress has undergone a steady development during this century, and has been closely tied

to one of the most ubiquitous form of traumatic stress, combat. The current definition of post-traumatic stress owes much to this history. The research described herein is designed to examine and shed light on post-traumatic stress symptoms among refugee survivors of torture.

Literature Review

Torture

History

Torture is probably as ancient as human civilization, or human warfare. While it is impossible to know just how far back it may go, it has clearly been practiced for millennia (Peters, 1985, chap. 1). Interestingly, torture is a part of the early Greek systems of law, and later of Roman law, which in turn became the basis for European law. By the fifth century BC, disputes in Greece were resolved no longer based on the relative status of the contending parties, but rather on the more impartial concept of justice (Peters, 1985, p. 12). Law, as it relates to the formal resolution of disputes, had to contend with the concept of evidence, as evidence was the basis of establishing truth. And it is in dealing with the difficult problem of evidence that torture found a formal role. Thus it is that, in European civilization, torture developed an important and respected place, well documented in the records of the maturing science of law.

The truth of opposing oaths sworn by accusing and accused parties was determined, from the ninth century, by the concept of "ordeal," which was based upon the religious assumption that God would permit neither a wrong to go uncorrected, nor the wronged party to be punished, and that in particular He would strengthen the ability of the innocent to resist the ordeal. Religious leaders could

hardly be expected to deny this belief, and often became involved in the process of determining truth. From this background grew the rules and procedures that became the process of inquisition. Only in the twelfth century did opinion shift from a reliance on God to determine truth, to a belief in the capacity of people to adjudicate differences, and, equally importantly, in the authority of officials to undertake these tasks (Peters, 1985).

As Roman law spread throughout all of Europe, so did the use of torture. Its purpose, according to a thirteenth century Roman lawyer, was "the inquiry after truth by means of torment" (Peters, 1985, p. 1). It has been argued (Langbein, 1976, chap. 4) that judicial torture, the "Queen of Proofs," was related directly to the prevailing definitions of proof and evidence. Today's well-known concept of "guilt beyond a reasonable doubt" is of relatively recent origin. In earlier times, proof could be established either by confession or by the testimony of two credible witnesses. (Credibility, of course, was determined more on social status than on more modern concerns of motive or reputation, but that is of no concern here.) In the twelfth and thirteenth century, rules allowing for open testimony subject to challenge by defendants, and judicial doubts about the worth of secret testimony, diminished the sense of certainty that judges would have preferred. Thus, confession by the defendant became more important in producing a secure sense of proof. Circumstantial evidence,

while allowed, could at best provide what was termed partial proof, which alone could not lead to conviction (Peters, 1985).

As a formal--and important--part of law, the use of torture had a full set of prescriptions and proscriptions. In particular, the torture was meant not to punish, but rather to compel. Thus, how the torture was to be carried out needed to be specified in some detail. During the period 1250 to 1750, judicial cases involving the use of torture followed a set of rules. Following an allegation of a crime, or possible crime, the court was empowered to carry an inquisito generalis, or what might now be called an inquest, in which a determination would be made whether in fact a punishable crime had been committed. This could lead to an inquisito specialis, comparable to a courtroom trial. In the most serious cases, e.g., murder or mutilation, the judge (who's duty it was to discover the truth) was empowered to use torture as a means of providing evidence against the accused. (It is interesting to note [Peters, 1985, pp. 29-37] that in the early Greek period citizens were protected from torture. During the first few centuries A.D. the application of torture was slowly extended from slaves to other lower classes. By the sixth century, torture had been extended to all but the highest class.)

Specific rules existed to ensure that torture was only applied when necessary (Peters, 1985). (Indeed, after the fourteenth century these rules were so formalized that the

judge no longer had any discretion in the matter.) There had to be sufficient evidence against the accused to merit the use of torture, evidence that would make the accused appear to be the likely criminal. The accused would be given multiple opportunities to confess, would be shown the instruments to be used in his torture as a way of encouraging a confession, and, failing all else, would be tortured. The torture itself was circumscribed, in that permanent physical damage was not allowed, the presence of both a medical expert and a notary was required, and the form of torture could be neither unusual nor cruel (obviously, a relative term). Finally, any confession made under torture had to be confirmed by the accused in court or otherwise away from the torture chamber (but note that if the accused did later recant, he became once again subject to torture).

Judicial torture, as practiced in Europe until its abolition in the eighteenth century, had a brief parallel in the ecclesiastical sphere. For a long period of time, the Catholic church prohibited the practice. An ecclesiastical text from the year 1140 states that "confession is not to be extorted by the instrumentality for torture," which stated the church's position over the previous several centuries (Peters, 1985, p. 49). Members of the clergy were specifically prohibited from participating in torture (Peters, 1985, p. 51). During the thirteenth and fourteenth centuries, however, ecclesiastical law began to bring itself

into conformity with the increasingly popular Roman law, and this conformity brought with it the practice of torture. Finally, a Bull of Pope Innocent VIII, dated 9 December 1484, mandated the distribution of a guide for judges in the trial of alleged witches, which included protocols for applying torture to the accused to extract confessions and determine guilt (Kramer & Sprenger, 1484/1971).

Current Usage

Judicial torture was abolished throughout Europe after the Enlightenment. Its use, however, resurfaced soon thereafter, both in Europe and its overseas colonies (Peters, 1985, p. 5). But the changing nature of the state also changed the circumstances in which torture was used. The purpose of torture has gradually shifted from the specific to the broad, from the search for truth in a specific crime to the broad search for security by the increasingly powerful state.

From the nineteenth century, with the development of massive citizen armies, the interests of the state became more blended with the interests of military intelligence. Torture was seen as a means of extracting military intelligence, and the great speed of modern armies placed greater urgency upon the quick extraction of that information. Furthermore, technological changes increased the range of information that could be considered of military value (e.g., information about industry and transportation) (Peters, 1985, p. 115). The use of torture

during World War II can be seen in that light.

However, torture was used before the war, e.g., in fascist and communist states (Stover & Nightingale, 1985a), and was directed not against military opponents, but against the state's citizens themselves. Thus, by the middle of the twentieth century, the focus of torture had moved from the judicial arena to that of state security, serving not so much the extraction of information but rather the production of compliance from the victim (Peters, 1985, pp. 162-163). And by the latter part of the century, torture lost much of its specific focus and has frequently become simply a tool to induce a sense of terror in the population at large (Kastrup, Genefke, Lunde, & Ortmann, 1988, p. 286). This has particularly been the case in the Americas (Weschler, 1990).

However limited the literature on victims of torture might be, the literature on the psychology of the torturers is yet more limited. Not only are there surely more victims than victimizers, it would seem less likely for the latter to step forward, for testimony or treatment, than for the former. A comprehensive look at the psychology of torture must consider the psychology of the torturer. Despite the difficulties of researching that topic, there are some surprising studies. Although that topic lies beyond the scope of this research, the interested reader is referred to research summarized by Staub (1990) and Gibson (1990).

The treatment of torture survivors, also not a part of

this research, is clearly a most pressing consideration for workers in the field. Readers interested in treatment will find that there are several worthwhile references, including surveys (Bouhoutsos, 1990; Bustos, 1990) and specific reports (Fischman & Ross, 1990; Ortmann, Genefke, Jakobsen, & Lunde, 1987).

Definition

The history above has demonstrated the essentials of torture: the torturer, backed by the power of the state; the victim; the systematic application of intense physical and mental torment by the torturer; and the goal. Perhaps originally that goal could be the eliciting of a confession, but more generally is should be seen as an attempt to compel the victim in the service of the state, be that service a confession, the truth, naming of names, ceasing opposition, or any other state interest.

Torture, defined in earlier centuries by the makers of law for the purpose of bringing torture to the service of the court, has now been redefined by the makers of international law for the purpose of bringing about its abolition. In 1975 the United Nations General Assembly adopted the Declaration on the Protection of All Persons from Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (Amnesty International, 1984, p. 253). Article 1 of this document provides an international standard for the definition of torture:

> 1. For the purpose of this Declaration, torture means any act by which severe pain or suffering,

> whether physical or mental, is intentionally inflicted by or at the instigation of a public official on a person for such purposes as obtaining from him or a third person information or confession, punishing him for an act he has committed or is suspected of having committed, or intimidating him or other persons. It does not include pain or suffering arising only from, inherent in or incidental to, lawful sanctions to the extend consistent with the Standard Minimum Rules for the Treatment of Prisoners.
> 2. Torture constitutes an aggravated and deliberate form of cruel, inhuman or degrading treatment or punishment.

The same definition, using virtually the same wording, appears in The United Nations Declaration on the Protection of All Persons from Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (the Convention Against Torture). This Convention was adopted by the General Assembly of the United Nations in 1984 (Stover & Nightingale, 1985b, p. 254).

Since World War II there have been numerous international declarations and treaties that have included a prohibition on the use of torture. In addition to the Convention Against Torture noted above, such documents include the Universal Declaration of Human Rights (applicable to all persons) and the Geneva Convention of 1949 (regarding prisoners of war), as well as several regional conventions: The European Convention for the Protection of Human Rights and Fundamental Freedoms, The American Convention on Human Rights, and The African Charter on Human and Peoples' Rights (Amnesty International, 1984, p. 30).

It is important to note that mental suffering is

specifically mentioned in the Convention Against Torture. Key elements of the definition include (1) intensity; (2) mental or physical trauma, or both; (3) intent; and (4) governmental involvement. Points (1) and (2) clearly have psychological salience; point (3) may have, as well (e.g., if victims of random violence experience psychological symptoms different from those of targeted victims, and if some torture victims see themselves as targeted while others see themselves as victimized bystanders).

Point (4) has been included in the definition so as to distinguish torture from other forms of brutality, e.g., the beating of a spouse or child. Not everyone might desire that the term torture be reserved in this fashion. While it is easy to understand objections to the overly casual use of the term ("That crowded train ride was torture"), other uses, also not involving government agents, would seem appropriate, such as deliberate, brutal and repeated attacks by a parent against a child. Peters (1985, pp. 152-153) argues that by applying the term to what already is defined as assault and battery, "the term 'torture' itself becomes simply picturesque, its legal definition is gutted and in its place is substituted a vague idea of moral sentiment." His point is that for the term to retain not only its legal precision but also its strength, it should not be a broad description that includes other forms of assault. While some may argue that this is narrowly legalistic, especially given the terrible nature of some of those other assaults

(Suedfeld, 1990, p. 1), that limited, internationally recognized definition matches exactly the focus of this study.

Refugees

Definition

The word "refugee" is easily understood in general terms, but laden with subjective judgments when brought to the particular. Most basically, a refugee is someone who is outside of their country of residence, and who has left to seek refuge, that is, was forced to take flight.

A refugee must be distinguished from an immigrant. Central to the definition of a refugee is the idea of flight, that is, a pressing need to leave that can only be delayed at one's risk. An immigrant, on the other hand, is one who's departure is planned and voluntary, in the sense that, even if the migration is motivated more by need than by desire, the immigrant lacks the sense of immediate and compelling necessity characteristic of the refugee.

A first objection to a definition based upon the concept of flight is that a fugitive from justice should not be considered a refugee. While this objection might be met simply by excluding criminals from the definition, the act that constitutes a crime might be seen, in another country, as simply the non-violent expression of one's beliefs. In fact, there are hundreds of people worldwide already imprisoned for this "crime" (Amnesty International, 1990). It is difficult, in the absence of international standards,

to determine exactly when a range of behaviors shift from accepted political action to criminal acts.

Another difficulty arises even in the absence of criminal concerns. International documents have long recognized as refugees persons fleeing from persecution (Goodwin-Gill, 1983), and nations have shown some willingness to offer asylum to such people. That openness diminishes sharply, however, when nations, especially industrialized nations, are faced with masses of people fleeing from the dangers of a civil war or the social and economic chaos it leaves in its wake, even though the definition of refugees has, for some time, been extended to include such people (Vernez, 1991, p. 629).

Government officials might find it appropriate or necessary to define refugees using a narrow and exacting standard that sharply separates those fleeing persecution from those fleeing war, upheaval, or chaos (sometimes referred to as de facto refugees [Melander, 1988, p. 12]); from the psychological point of view, however, such legal distinctions, meant to limit the responsibilities of governments, are less meaningful (Stein, 1986, p. 6). The common experience of uprooting, uncertainty, danger and fear unites these various classes of refugees psychologically; to divide them according to administratively convenient criteria would serve no psychologically useful purpose. In fact, it is not just the psychological dimension in which common links are shared by the different types of refugees.

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To assume that a clear distinction can be drawn among social, political and economic sources of migration is to misrepresent reality (Richmond, 1988).

Yet such a misrepresentation is common, and is heard not only in government agencies that might have an interest in promoting that view, but even from a well-established and liberal member of Congress (A. Beilenson, personal communication, January, 1991). Determining the truth of such assertions is complicated. As one researcher noted (Stanley, 1987, pp. 133-134)

> Motivations of individuals are complex: some individuals who leave El Salvador out of fear may also hope for economic success in the United States. Economic conditions may interact with violence in a number of ways as well. Poorer areas of El Salvador may be particularly subject to political violence because their inhabitants have had more reason to mobilize politically. Conversely, violence may disrupt economic activities, thereby eliminating jobs and reducing pay levels. Individuals who are unemployed may be suspected of being subversives and therefore more vulnerable to attack by security forces.

In an attempt to separate economic motivations from fears of violence, Stanley used multiple regression analysis to study the influence of levels of violence in El Salvador and Salvadoran economic performance on migration to the U.S.

Monthly migration was estimated by the number of Salvadorans apprehended by the U.S. Immigration and Naturalization Service. To account for the effects of uneven levels of enforcement over time, the rate of apprehension of Mexican nationals was used as a statistical control.

There are a number possible measures of political violence, many probably highly correlated. A measure of the level of individual persecution is provided by the number of political murders per month. This information is gathered by Salvadoran human rights agencies. Such reports tend to have an urban bias, in that information from rural areas is harder to gather. Another event known to produce refugees, major military sweeps, has a rural bias, as the sweeps tend to occur in the countryside. These two factors were included in the regression analysis.

The Salvadoran economy was also a factor. It has been declining since the onset of widespread civil strife in 1979, yielding a measure of economic performance that was essentially non-fluctuating and negative in slope.

Finally, because it can take several weeks to travel from El Salvador to the U.S. border, a two- to four-month time lag was built into the regression analysis.

Using this regression model, Stanley found that more than half of the variance in the number of border apprehensions was explained by the two indicators of political violence. Economic performance was not a statistically significant factor. These data, Stanley concludes (p. 147), suggest that, for the period he investigated (May, 1979 to March, 1984), "fear of political violence is probably the dominant motivation of these migrants."

Thus, the more broad, non-governmental definition of

refugee is meaningful for researching stress in refugee populations, and has been adopted in this study. Refugees will include both those who are fleeing specific persecution as well as those fleeing the indiscriminate destructive effects of civil war.

Worldwide, the number of people who are refugees is enormous. Current estimates indicate that there are approximately 15 million refugees (Vernez, 1991, p. 627). Most refugees end up in countries neighboring their own. Since most refugees are from Africa, the Middle East, and South Asia, it is those areas in which the overwhelming percentage of refugees are found (Vernez, 1991). In recent years the United States has become the country of resettlement for substantial numbers of refugees from Central and South American countries (Zolberg, Suhrke, & Aguayo, 1989, pp. 206-207). It has been estimated that 10 per cent of refugees entering Western countries are survivors of torture (Laborde, 1989, p. 33). Amnesty International has reported (1984) that torture is practiced in over 64 countries, including 15 countries of South and Central America. Thus, one should expect to find significant numbers of torture survivors among the refugees coming to the United States from Central and South America.

Traumatic Stress

The twentieth century has provided a veritable plethora of examples of mass exposure to intense trauma, including genocide (Armenia, Europe, Uganda, Cambodia); concentration

camp brutality (Europe, Cambodia); massive, sustained combat (1914, 1939); fire-bombing (Tokyo, Dresden, Hamburg); atomic bombing (Hiroshima, Nagasaki); nuclear disaster (Chernoble); starvation (the Ukraine, Ethiopia); civil war (Lebanon); and any century's variety of natural disasters (volcanoes, earthquakes, tornadoes, etc.). Previous centuries have surely seen their share of trauma as well. Perhaps the trauma with the greatest number of participants in this century has been the experience of combat in war.

The early history of the study of traumatic stress was stimulated, in part, by the tremendous numbers of dysfunctional soldiers produced by the two World Wars. And this history has a distinctively physiological leaning. Medical officers in World War I popularized the term shell shock, which reflected their attempt to account for symptoms (e.g., nightmares, apathy) often seen in soldiers lacking physical wounds; this term highlighted their belief that underlying those symptoms there had to be a physiological (neurological) explanation, in this case, damage to the brain caused by the physical shaking that could result from exposure to exploding artillery shells (Horowitz, 1986, p. 44). Although not fully satisfactory (not every soldier suffered a cerebral concussion, or was close enough to an explosion to be presumed to have), the physiological bias was continued into World War II, when the syndrome was given a new name, combat fatigue. Fatigue retained the physiological quality crucial to a denial of the

psychological effects of traumatic experience, and, unlike shell shock, it was almost universally experienced by soldiers. It was only after World War II that traumatic stress as a wholly psychological phenomenon replaced physiologically-based explanations.

Stress has also been characterized from a physiological point of view that is primarily biological. Selye (1983) outlined a set of reactions to stress for which, as with the psychological approach to stress, the exact nature of the stressor was less significant than was its intensity. In Selye's model, the body experiences a General Adaptation Syndrome that begins with exposure to a stimulus to which it was not adapted, which then produces a two-phase acute reaction, consisting of shock followed by mobilization of the bodily defenses. Should the stimulus continue, a longer second stage would occur, which Selye termed the state of resistance. During this stage, symptoms might even disappear, reflecting a successful adaptation to the stressor. However, should the stressor continue, then eventually a third stage, exhaustion, would ensue. "Since adaptability is finite, exhaustion inexorably follows if the stressor is sufficiently severe and prolonged" (Selye, 1983, pp. 4-5). At this point, symptoms may reappear.

At the dawn of this century, when Breuer and Freud brought clinical psychology into being, the psychological responses to trauma were systematically studied (Freud, 1896/1959). Symptoms (of hysteria) were seen as reactions

to a traumatic event or events; these symptoms typically included compulsive repetitions, denial, and constriction of affect. Although over time Freud modified his theories, expanding the ranges of both the causal traumas and the resulting symptoms, he was the first to establish the psychological concept of trauma producing symptoms (Horowitz, 1986, pp. 19-20).

Post-traumatic stress syndrome.

By mid-century, psychologists had begun to study the survivors of several of the intensely traumatic experiences noted earlier (for example, see the bibliography in Marcus & Rosenberg, 1989, regarding Holocaust survivor studies). Early investigators (e.g., Kardiner & Spiegel, 1947) noted the existence of characteristic symptoms among survivors, including nightmares, emotional explosiveness, and pervasive anxiety, while later researchers found that these symptoms frequently persisted for years and even decades after the cessation of the trauma itself (Goldstein, van Kamman, Shelly, Miller, & van Kamman, 1987; Green, Grace, & Gleser, 1985).

As American involvement in the Vietnam war drew to a close, psychologists and other researchers began finding a large number of veterans demonstrating symptoms similar to those of former concentration camp inmates, often with delayed onset. This syndrome became the focus of intense research efforts (for an extensive bibliography see Stubbe, 1985), and within a decade it was identified as a stress

reaction and formally titled Post-Traumatic Stress Disorder (American Psychiatric Association, 1980).

When John Wilson was developing the concept of post-traumatic stress disorder while working with Vietnam veterans during the 1970s, his theoretical basis was psychodynamic, and was built specifically on the work of Mardi Horowitz (Wilson & Krauss, 1985).

Horowitz (1976) took an overlapping, non-uniform, and confused variety of syndromes all relating to stress following trauma (e.g., war neurosis, gross stress response, and traumatic neurosis) and unified them by noting that different behavioral and psychological symptoms are all part of a single stress response entity in which one cluster of symptoms predominates for a time and may be replaced by another cluster. Horowitz's phase-based definition encompassed the varying "syndromes" previously reported, while simultaneously unifying them into a single diagnostic entity. In his model, symptoms fall into either of two categories: intrusion and avoidance. At any time, symptoms from one group may be active, only to give way later to symptoms from the other group. He reports (1976) studies showing this phased model with such diverse traumatic stress stimuli as concentration camps, atomic bombing, widowhood, dying or threat of dying, and rape.

In explaining this phenomenon, Horowitz relied upon psychoanalytical theory, stating that "the most important assertions about psychological responses to threat were

advanced by Breuer and Freud in the 'Studies on Hysteria'" (Horowitz, 1976, p. 18), and noting that stress symptoms were seen, psychoanalytically, as compulsive repetitions, and denial and constriction.

Clinical diagnosis.

With the publication in 1980 of the American Psychiatric Association's third revision of their diagnostic manual (American Psychiatric Association, 1980), post-traumatic stress formally found its place among the recognized mental disorders. Users of the original edition of the Manual, when confronted with a patient exhibiting post-traumatic stress symptoms, might have referred to the diagnosis "gross stress reaction." This diagnosis comprised those who were "exposed to severe physical demands or extreme emotional stress" (American Psychiatric Association, 1952, p. 40). The diagnosis was differentiated from a neurosis (or a psychosis) because of the presence of an "intolerable" (p. 40) stressor, a transient course, and responsiveness to treatment. Should symptoms persist, then the problem was neurotic rather than normal, and the diagnosis of "gross stress reaction" had to be considered as a temporary one, to be replaced by a "more definitive diagnosis" (p. 40).

In its second edition (American Psychiatric Association, 1968), the name of the diagnosis was changed to "transient situational disturbance" but its characterization was essentially identical, consisting of an "acute reaction

to overwhelming environmental stress" (p. 48). As was the case in the original edition of the Manual, chronic symptoms were indicative of a problem other than stress, and required a change of diagnosis: "If, however, the symptoms persist after the stress is removed, the diagnosis of another mental disorder is indicated" (p. 48).

Research in traumatic stress, inspired by the chronic symptoms among many Vietnam veterans, led to the inclusion, in the next edition of the Manual (American Psychiatric Association, 1980) of the new diagnosis, post-traumatic stress disorder. This diagnosis differed from the previous Manual's classification of reactions to external stress in two major areas: (1) chronicity of symptoms is recognized as inherent to the disorder; and (2) the diagnosis is not dependent upon the absence of preexisting dysfunctions, thereby acknowledging the overwhelming impact of overwhelming stress. In addition, this diagnosis is unique in requiring a known etiology; while earlier versions of DSM relied upon the formulation of a causative factor, in part because their diagnoses often lacked a description of specific symptoms, DSM-III diagnoses focused upon symptoms and eschewed etiological assumptions--except for Post-Traumatic Stress Disorder.

Post-traumatic stress disorder, as defined by DSM-III, is unique among the Manual's diagnoses in that it requires the identification of an instance of a causative agent from among a class of agents: "a recognizable stressor that

would evoke significant symptoms of distress in almost everyone" (American Psychiatric Association, 1980, p. 238). Diagnosis is completed by matching the patient's symptoms to symptoms in three lists; the patient's symptoms must match at least one symptom in each of the first two lists, and must match two symptoms in the third list.

The first list involves intrusive reexperiencing of the traumatic event, either through dreams, memories, or flashbacks. The second list focuses upon withdrawal, either interpersonal or emotional, defined by constricted affect, alienation, or loss of interest in relationships. The last list, which requires two matches, is a miscellaneous category consisting of six items: a marked startle response; sleep disturbance; survival guilt; difficulty focusing or remembering; avoidance of reminders of the traumatic event; and intensification of symptoms when exposed to such reminders.

The most recent revision to the Manual, DSM-III-R (American Psychiatric Association, 1987), retained the post-traumatic stress diagnosis, but the diagnosis criteria were changed slightly. The nature of the stressor was clarified, and a larger number of examples were offered. The grouping of symptoms in the three categories was modified. Those responsible for the revision utilized Horowitz's explication (1976, 1986) of intrusive and avoidant phases when they reorganized their three lists of symptoms (Brett, Spitzer, & Williams, 1988) by making the lists more parallel to the

intrusion/avoidance model. Some items from the previous version's third (miscellaneous) category were moved into the first category (reexperiencing), a few new items were added to the categories, some existing items were reworded to make them clearer and more specific, and the miscellaneous category now focused on memory impairments characteristic of the disorder.

Both DSM-III and DSM-III-R list torture as an example of a trauma that would be an appropriate stressor for a diagnosis of post-traumatic stress disorder.

It is clear that the absence of a stress reaction that allowed for a chronic course was a flaw in the earlier versions of the Manual that has been corrected with the inclusion of Post-Traumatic Stress Disorder in the third edition. While the new nosology has undoubtedly played a helpful role in organizing research activity, many criticisms about the diagnostic category have been raised. Theoretical underpinnings for this new disorder are not well advanced. Some would even question whether Post-Traumatic Stress Disorder is a unique category of mental illness, arguing that all stressors cumulatively increase the risk of developing symptoms, and that the existing diagnosis Adjustment Disorder differs from Post-Traumatic Stress Disorder not in kind, but only in magnitude of the stressors (and, therefore, of the symptoms), i.e. that the stressor should be seen as part of a continuum of stressful stimuli rather than as a discrete stimulus (Breslau & Davis, 1987).

Others have questioned whether several of the "menu" of symptoms correlate well with symptoms exhibited by patients fitting the diagnosis (van Kampen, Watson, Tilleskjor, Kucala, & Vassar, 1986), while problems with differential diagnosis have also been raised (Green, Lindy, & Grace, 1985). These criticisms are appropriately of concern to diagnosticians, however they need not be central to those interested in traumatic stress research when the focus is on stress and its manifestations, rather than diagnostic criteria.

Trauma Survivor Research.

Although recognition of a post-traumatic stress syndrome is quite new, the syndrome itself certainly is not. In the seventeenth century a disaster occurred of such magnitude that it is still known as the Great Fire of London. This destruction, which occurred in September of 1666, devastated much of the city and caused untold trauma among the survivors. One contemporary resident, Samuel Pepys, maintained a journal during and for some months following the fire, in which he recorded not only facts about the catastrophe, but also his own emotional state, for up to eight months after the fire. A review of that diary (Dely, 1983) clearly indicates that Pepys experienced post-traumatic stress, with symptoms lasting for at least those eight months.

In this century, civilian survivors of several natural and industrial disasters have been studied. Such survivors

commonly report post-traumatic stress symptoms. Madakasira and O'Brien (1987) studied survivors of a devastating tornado that struck a rural North Carolina community in 1984. Five months after the tornado 116 survivors were interviewed, and on the basis of answers to the Hopkins Symptom Checklist, modified to include most of the DSM-III criteria for post-traumatic stress disorder, it was determined that 59 per cent of those interviewed would meet that diagnosis. Regardless of diagnosis, 82 per cent reported intrusive thoughts of the trauma, and 81 per cent reported experiencing "easy startle" responses.

Victims of crime also are subject to post-traumatic stress. In an interesting study by Kilpatrick, Saunders, Amick-McMullan, Best, Veronen and Resnick (1989), in which they found that female crime victims were significantly more likely to fit the diagnosis for post-traumatic stress disorder than non-crime victims, the researchers further divided the crime victim group into categories based upon which of three traumas were part of their crime experience: Rape, life threat (e.g., assailant armed with a gun or knife), and injury. All combinations of the three traumas were considered (e.g., injury alone; rape with life threat; etc.), each subject belonging to exactly one group. Post-traumatic stress diagnoses within each group were common. Seventy-eight per cent of those experiencing all three traumas were so diagnosed; the diagnosis rate was 69 per cent for those in the rape and life threat group; and 58 per

cent for those in the rape and injury group. Even in the lowest groups the prevalence of post-traumatic stress was at least one in five (life threat alone, 21 per cent; injury alone, 25 per cent; rape alone, 29 percent; and injury with life threat, 31 per cent).

Many studies of combat veterans and prisoners of war have been published, consistently finding high levels of post-traumatic stress symptoms. Studies of World War II veterans have found continuing symptoms as many as 40 years after discharge (Goldstein, van Kamman, Shelly, Miller, & van Kamman, 1987). Beebe (1975) found that American survivors of the long and harsh conditions of Japanese prisoner of war camps suffered pervasive psychological disorders similar to those of concentration camp survivors.

Refugees.

In the past 15 years some one million refugees have entered the United States (Vernez, 1991). Cross-cultural stability of post-traumatic stress disorder in response to extreme and prolonged trauma has been demonstrated by studies of Cambodian refugees, who experienced treatment similar to European concentration camp survivors. In an epidemiological study in the Boston area (Mollica, Wyshak, & Lavelle, 1987), Cambodian survivors of the communist-led genocide demonstrated high levels of post-traumatic stress symptoms. Rozee and Van Boemel (1989) reported unusual levels of psychogenic blindness among Cambodian concentration camp survivors in Los Angeles County. These

refugees also had high levels of symptoms typical of post-traumatic stress (e.g., nightmares and intrusive re-experiencing of the traumas) (p. 41).

The experience of being a refugee, even in the absence of torture, is likely to be a substantial source of stress. It should first be recalled that a refugee, unlike an immigrant, has migrated under duress. In addition to whatever source or sources of duress were present in the home country, the experience of fleeing, that is, of being a refugee, can also prove to be traumatic. Salvadorans fleeing into, or through, Mexico have reported (Frelick, 1991) being victims of extortion, robbery, assault and rape.

Finally, resettlement in a foreign land, especially if in a foreign culture, adds additional stress. Studies over the last 30 years (see Lin, 1986) indicate that many refugees would fit the current diagnosis of post-traumatic stress disorder.

Refugee Torture Survivors.

As has been noted above, probably some 10 per cent of refugees entering Western countries are survivors of torture (Laborde, 1989, p. 33). Political unrest during the last decade in Central America has contributed to an enormous outflow of refugees from some countries of the area into their neighbors; this flow has extended to the United States, to which it has been estimated that one-half million Salvadorans have come (Leslie & Leitch, 1989, p. 316). And a decade earlier, South America experienced what seemed to

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be "an almost unstoppable wave of military coups and repressive military juntas" (Bustamante, 1990, p. 371). The resulting repression there also resulted in a flow of refugees, many of whom had been tortured (Goleman, 1989; Goodwin-Gill, 1983, p. 112).

Despite the large numbers of Hispanic refugees, many being survivors of torture, who entered the United States during the last two decades, psychological studies of Hispanic refugee torture survivors were lacking before 1988 (Cervantes, Salgado de Snyder, & Padilla, 1988, p. 4). Existing studies of refugees often failed to have a comparison group.

The study carried out by Cervantes, Salgado de Snyder, and Padilla (1988) assessed general symptoms, and included questions specifically aimed toward the criteria for post-traumatic stress disorder. They compared recent Mexican immigrants with recent Central American refugees who were placed in one of two categories: those leaving their home country due to war and political unrest, and those leaving for other reasons (economics, education, family reunion). They found a significantly different proportion of post-traumatic stress diagnoses among the three groups: while the Mexican immigrants had a 25 per cent rate of post-traumatic stress diagnoses, the war-related and non-war-related Central American refugees had rates of 52 and 49 per cent, respectively, thereby establishing both that refugees are an at-risk group as distinct from immigrants and that

the finding is independent of the factors that resulted in the person leaving their country.

Survivors of torture experience physical trauma, resulting in physical symptoms in addition to their psychological symptoms. In Canada, 150 Latin American refugees who experienced torture were studied (Allodi, 1980). While all of them had both psychological and medical symptoms from their trauma, Allodi notes that psychological symptoms were both the most persistent and the most damaging (p. 8).

Pre-morbid personality.

In the earlier part of this century, after psychiatrists and others treating psychiatric war casualties gave up the belief that their patients' symptoms were the result of neurological damage ("shell shock"), they took the position that their patients were differentiated from non-patient soldiers by virtue of their pre-morbid personalities. They believed that flaws in their patients' personalities were the critical factor in their breakdown under the stresses of combat.

While this theory retains some degree of interest, most studies of combat survivors that include measures of pre-morbid functioning have shown that, although in some cases there is a relationship between that factor and stress outcome, that relationship tends to be weak, and specifically is much weaker than the exposure to trauma (combat) factor, contributing considerably less to the

explanation of variance than the exposure factor (Foy, Carroll, & Donahoe, 1987; Foy & Card, 1987).

In addition, one study (Helzer, 1981) has found that exposure to combat itself correlates with pre-morbid personality, in that soldiers with poorer socialization were exposed to more combat. This finding has not been explored (that I know of) in other studies, leaving moot the author's suggestion that poorly socialized soldiers were differentially selected for combat roles by officers. The finding does, however, weaken the implication of any evidence, in combat-related post-traumatic stress studies, of the relationship of pre-morbid personality (if of the poorly-socialized type) to outcome following exposure to extreme stress.

In a study of Norwegian concentration camp survivors following World War II, among various pre-arrest factors considered (e.g., family history of mental disease, childhood adjustment, pre-arrest personality, social adjustment), only two factors were found to correlate with psychological disturbances several years after liberation: age at arrest (under 25) and pre-existing mental illness (Eitinger & Askevold, 1968, pp. 53-54). On the other hand, the severity of imprisonment was significantly correlated with chronic outcome (p. 55). Degree of torture ("very severe," "severe" or none) only approached statistical significance, however. The authors note that "The most important factor, however, was the <u>total combination</u> of

different stresses to which prisoners were subjected" (emphasis in the original) (p. 55). In a study published earlier by Eitinger (1964), in which Norwegian and Israeli concentration camp survivors were both divided into better and more poorly functioning groups and then compared, Eitinger concluded (p. 187-188) that "...it is probable that the pre-morbid personality is of mere subordinate significance in a traumatizing of the degree of severity we are dealing with here, and that, in the first place, it is the degree and duration of the traumata which are decisive for the tragic final results."

Social support.

Many studies of post-traumatic stress disorder have included a measure of the social support available to, or used by, the subjects. Often such studies have found that this measure is significantly correlated with post-traumatic stress severity, and in fact "explains" about as much of the variance as does the primary variable, exposure to trauma (e.g., Stretch, 1985; Madakasira & O'Brien, 1987).

While social support has face validity as a factor in symptom reduction, it may be a spurious variable in the case of exposure to extreme stress. In cases of extreme stress, social support may be confounded with what it supposedly "explains" because significant stress results in symptoms that impair relationships; such impairment, in turn, is detected by the social support measures (which typically are self-reports of the amount of social support used, rather

than the amount of support offered). In fact, impaired relationships, constriction and withdrawal are themselves defined as symptoms of stress, and thus by definition will correlate with stress. Utilization of social support, or involvement in socially supportive relationships, therefore, is a priori a part of the definition of post-traumatic stress disorder rather than an independent factor that influences its severity.

While social support may be an independent or semi-independent factor in studies of moderate stress, it would seem to be a confounded variable in cases of extreme stress, and therefore is not a part of this study.

Impact of Events Scale.

Researchers have used a variety of methods to operationalize the post-traumatic stress diagnosis, including clinical interviews (e.g., Blanchard, Gerardi, Kolb & Barlow, 1986), the Hopkins Symptom Checklist (Madakasira & O'Brien, 1987), and the MMPI (Keane, Wolfe & Taylor, 1987). As a research instrument, clinical interviews are labor-intensive and require at least two independent judges. Furthermore, the result of this effort is simply an ordinal variable (diagnosis positive or negative), which has comparatively the least value both statistically and theoretically. The other methods mentioned have also been attacked on both theoretical and empirical grounds (e.g., Hyer, Fallon, Harrison & Boudewyns, 1987; Vanderploeg, Sison & Hickling, 1987; Cannon, Bell,

Andrews & Finkelstein, 1987).

Along with providing a theoretical foundation for the symptoms and phases seen in post-traumatic stress, Horowitz also developed a measure of stress, the Impact of Events Scale (Horowitz, Wilner & Alvarez, 1979), that distinguished between the symptoms of intrusion and denial, and also provided a 75-point range of symptom intensity. This range of response, with a true zero point, allows for the scale to be used in a wide variety of statistical studies.

The scale has been cross-validated (Zilberg, Weiss & Horowitz, 1982), and reviewers suggest that "the IES measures a universal pattern of responses in reaction to stressful events" (Tennen & Herzberger, 1985, p. 359).

The scale consists of fifteen questions, each requiring one of four frequency-related responses (to such questions as "I avoided letting myself get upset when I thought about it or was reminded of it"); the responses range from "Not at All" through "Often." A respondent simply indicates which of the four response categories best reflects his or her experience during the past seven days.

On theoretical and methodological grounds, the IES seems an appropriate instrument for this study.

Spanish Translation.

This research required a Spanish version of the Impact of Events Scale. An assistant to Dr. Horowitz reported (N. Field, personal communication, February, 1991) that there was no official Spanish translation of the instrument. For

this research, a Spanish version of the questionnaire was created by translating the original, which was done by two translators, the first providing a rough draft which was then polished by the second. This version was edited separately, in turn, by two bilingual native Spanish speakers, one from Central America and the other from South America.

To further insure the accuracy of the final product, a backtranslation of the Spanish version was performed by another bilingual speaker, independent of the other translators. (To insure an unbiased translation, it was required that the translators had no previous exposure to the Impact of Events Scale.) On most of the items the backtranslation was exactly or virtually identical to the original. No significant differences were noted. The original questionnaire, the backtranslation, and a commentary appear in Appendix A. The Spanish-language version is a part of Appendix B.

A note needs to be made about a special problem in assessing behaviorally-defined symptoms in torture survivors. Survivors can have experienced severe bodily trauma, specifically including head trauma. Such trauma, of course, can lead to acute or chronic neurological deficits, which in turn can interfere both with relationships (which would affect some measures of post-traumatic stress) and with thought processes or concentration (which again could affect some measures). This situation has not been well

evaluated (Goldfeld, Mollica, Pesevento, & Faraone, 1988). It is possible that, among torture survivors, some of the symptoms of post-traumatic stress will in fact be symptoms of neurological trauma. The degree to which this might have an effect, either in recent refugees or in long-term refugees, is not known, and is not controlled for (other than through natural randomization) in this study.

Exposure to Torture

DSM III and DSM III-R both note that the clinician should record the severity of the stressor underlying a diagnosis of post-traumatic stress disorder (American Psychiatric Association, 1980, p. 236; American Psychiatric Association, 1987, p. 248). It would be reasonable to hypothesize that stressors of differing severity might result in degrees or clusters of symptoms. With respect to torture, one might wonder whether a survivor of imprisonment and torture of a few days or weeks duration might experience a different mix or duration of symptoms than a survivor of several years in a concentration camp or a harsh prisoner of war camp. Such issues can prove important both for treatment and for theory. Yet, to consider such questions, one must first define what is meant by exposure to torture.

Although torture is, in its essence, brutally simple, it comprises an extremely complex and interacting set of variables. The fundamental components of exposure, such as duration, intensity, frequency and quality, can be difficult to define.

Defining the severity or intensity of a torture poses formidable theoretical and practical challenges, and I know of no research that has addressed this question. Frequency and duration of exposure remain as assessable measures. Nonetheless, obstacles exist in the measurement of either factor.

Consider the factor duration. A person subject to great deprivation and degradation, e.g., in a concentration or prisoner of war camp, could be said to be suffering torture for the entire duration of imprisonment. In cases of torture not connected with such camps, on the other hand, the prisoner typically undergoes one or more intense torture sessions, separated by hours or even days of imprisonment (see, for example, the testimonies in Koloff and Doan, 1985; and in Foster, 1987, chap. 6). Sometimes the prisoner is left alone in their cell between sessions; sometimes the cell guards treat the prisoner very harshly. Sometimes there is an explicit threat of execution; there is always the implicit threat of more torture. Some cells are solitary; in others, the screams from the interrogation rooms can be heard. Although physically the prisoner may be untouched between "interrogations," certainly it must be concluded that psychologically the process of torture is ongoing.

In these cases, what is the duration of torture, i.e., when does the torture cease? Even if the interrogations end, the prisoner is still fully at the mercy of the

torturers, and cannot be sure that the worst is over. Perhaps it is when the prisoner is finally transferred to an ordinary detention center. But does the torture (not the psychological effects of torture, but the psychological experience of torture) end when the physical torture ceases? Even in an ordinary prison--indeed, even when freed to go home--the torturers retain the power to return the prisoner to the torture center. One can define an ending point (and to do research involving duration, one must), and one's definition may prove useful, but whether it in fact coincides with the cessation of torture remains moot.

The intensity component of exposure is even more difficult to analyze. How does one distinguish levels of intensity? What interplay of psychological and physical pressures, motivation to resist, strength of hope or despair, determines an individual's experience of intensity? Two contrasting testimonies highlight this problem. Strom and Eitinger (1968, pp. 19-24) provide a translation of a transcript of the 1945 report of a Norwegian citizen arrested by German occupation forces for suspected clandestine activities, who spent months in German concentration camps. The prisoner reported being subject to a series of torture sessions that involved ferocious beatings by seven or eight Gestapo members at a time, resulting in severe injuries, including right-sided paralysis that lasted for some years. At one point he was tortured with a crude wooden and wire screw-like device,

tearing the flesh from his leg bone.

> I had never felt such terrible pain before and it was impossible for me, even if I had wanted to, to say anything and so save myself any further torment. Suppressing his fury, the leader said, "Will you now tell me the names of the people you have been working with and how the whole organization works." I could only reply with a mixture of cries and gurgles in the throat. As the flesh below the knee became loosened, he moved the wire further up past the knee and pulled it tight. However, a part of the apparatus must have broken, for one of the wedges penetrated deep into the flesh in my leg, and the pain was so great that I fainted once more. It was a terrible Christmas, and I remember nothing more until I woke up in my cell as a mass of raw torn flesh.

This horrifying account makes clear the physical side of torture. But it can be difficult to separate and assess the impact of psychological and physical stress. Another Norwegian prisoner, Strom and Eitinger report (p. 19), "who had been arrested on a serious charge was taken to an office with a German [officer] who just sat and looked at him for a whole day without saying a single word. This proved too much for the prisoner and he 'talked,' which caused him bitter self-reproach afterwards." Whatever thoughts and fears may have been running through that man's mind during that long day would seem to be impossible to assess. Anyone might find the experience of being stared at all day unnerving. In the context of an enemy officer of a savage and determined occupying force, the experience takes on inexplicable terror. Which prisoner suffered the greater intensity of torture, the one who broke down and talked, or the one who did not?

Another factor contributing to a definition of exposure is frequency. A questionnaire or interview can readily provide a frequency count of specific tortures, but this approach is also fraught with difficulties, foremost of which is the enormous difficulty of recalling accurately the frequency of beatings, threats, etc. In addition, "a" beating may consist of any number of blows, of any force, to any parts of a healthy or already injured body, over any length of time. Under these circumstances, does the observation that "both prisoners were beaten twice" have comparative meaning? Similar considerations apply to the other specific tortures.

These difficulties are well reflected in the literature by the absence of any instrument claiming to assess exposure. In some cases the best that can be done is to note dominant features (e.g., internment in a concentration camp).

Because no study has provided a measure of exposure to torture, research findings have been limited to the descriptive and correlational levels. This is an impediment to more sophisticated research.

When quantified, torture is usually reported as a list of specific tortures that subjects have endured (e.g., Allodi & Cowgill, 1982; Domovitch, Berger, Wawer, Etlin & Marshall, 1984). Perhaps the most comprehensive of such reports was published recently by a researcher at the seminal International Rehabilitation and Research Center for

Torture Victims, in Copenhagen (Rasmussen, 1990). Reviewing interviews of 200 patients treated at that facility, Rasmussen found over 75 specific tortures, 65 physical and a dozen psychological. Items on other researchers' lists are mostly subsets of Rasmussen's listing. At the Center, the world's first treatment and research facility (Ortmann, Genefke, Jakobsen, & Lunde, 1987), the need for a means of approaching a measure of torture exposure has been recognized. However, the staff knows the difficulties involved, and, while they would like to see the development of such an instrument, they currently have no instrument that addresses exposure as a research issue (S. Bojholm, personal communication, May, 1990).

To form the questionnaire used in this study, the few unique items from other lists were added to Rasmussen's list, which was then slightly shortened to clarify some overlapping items. In addition, space was provided for the subject to enter up to four torture experiences not already appearing on the questionnaire. Using this resulting list, a measure of frequency (number of times the person experienced a torture) and duration (number of days the person was subject to torture) can be obtained.

Except as a memory aid for subjects reporting frequency counts, the listing of specific tortures plays no role in this study. Given a large sample population (i.e. several times the number of torture items) and a detailed questionnaire, one could attempt a definition of intensity

for each torture method (e.g., as being proportional to the degree of symptoms that result) and to isolate statistically (using discriminant analysis) the so-defined intensity of one or another torture. While logically flawed (intensity would be defined as--i.e., inferred from--the effect that that intensity is assumed to have), such a study would at least generate further theoretical and experimental ideas. This study is not of those proportions, and does not address hypotheses relating intensity to frequency.

For the purposes of this research, degree of exposure to torture has been defined as the number of days during which a person was subject to torture, i.e., the period during which the torture sessions took place. It is to be recognized that this is at best an approximate measure of exposure; furthermore, the degree of approximation cannot be known, as no objective standard exists. Thus, this is an operational definition, intended to be of use in specific research efforts, and cannot be seen as putting the issue to rest.

Methodology

Hypotheses

Primary Hypotheses: Exposure

While all refugees, even simply immigrants, may be expected to experience some degree of stress as a result of their uprooting, the first hypothesis (**H1**) is that those refugees who have experienced torture will be experiencing significantly more stress than will refugees who have not been tortured.

A corollary hypothesis (**H1a**) is that, along with the group difference stated above, there will be a significant proportional relationship between exposure to torture and degree of stress.

Secondary Hypothesis: Duration

A staple of the post-traumatic stress disorder is that symptoms, when untreated, commonly persist for years. The secondary hypothesis (**H2**) is that, as the number of years since leaving their home country increases, the group not exposed to torture will show a decrease in stress symptoms while the symptoms among the exposed group will be independent of time.

For clarity, note that this is not a longitudinal study; the hypothesis is that stress scores of subjects (from the non-exposed group) who have been in the United States for a longer period will be smaller than the scores of recent arrivals, while this time-dependent relationship will not be true of members of the exposed group.

Measures

Demographic information.

A variety of demographic information was requested of each subject. They were asked to report their country of birth, country in which they were raised, and country in which they were living before they decided to come to the United States; the month and year in which they left for, and arrived in, the United States; and the month and year of their birth. The questionnaire asked for their marital status, educational level, and occupational level, to be answered with respect to the time they left for North America, and also currently. In addition, they are asked whether they had ever been arrested or detained (before coming to North America), and if so, whether they were abused during that detention or detentions. They were also asked to report how politically active they had been (little, some, or very). Finally, they were asked to check the reason they decided to leave their country. In addition to torture, they could check arrest, death threats, arrest or threats against family members or friends, economic problems, or they could write in another reason. Because persons who have availed themselves of psychotherapy could not be used in this study, they were also asked if they had received counseling in this regard, and if so, over how many sessions.

Post-traumatic stress.

To assess post-traumatic stress, subjects were administered the Impact of Events Scale, translated into Spanish. For a discussion of translation issues, see Appendix A.

Exposure to torture.

Exposure to torture is defined here as the number of days, during the subject's detention, during which he was tortured, as reported by each subject on the questionnaire. Note that, if a subject was detained more than once, this number represents the sum of all such days over all detentions. The torture portion of the questionnaire consisted of two parts. The first part lists a number of torture practices, 32 physical and 22 psychological, and the subject is asked either to indicate the number of times that event occurred to him, or, if he could not recall the number, just to check whether it had happened to him. Space was provided to add events that may have been missing from the list.

The second part asked for the number of days, totaled over all detentions, that the subject was detained; and the number of those days during which the torture occurred. In addition, each subject was asked for the month and year in which the torture ended, and whether, during this time, they were forced to sign or make a statement, or to make a promise regarding future behavior, that they did not wish to. Finally, they were asked how politically active they

had been before their detention.

The definition of torture is, ultimately, subjective, in that it rests upon the meaning of the term severe, which is not defined behaviorally. Certainly one end of the continuum of mistreatment is clearly torture, but at what lesser point on that continuum does torture begin, and how can that point be explicated? To determine whether a subject in this study was a victim of torture, the following questionnaire responses were examined: the self-report of the reason for leaving; the items checked on the torture questionnaire (number of items, range of items, frequency of each checked item); and duration of detention. While in theory some cases could arise in which it would be difficult to determine whether a person was in fact subject to torture, in practice very few such cases arose. (For a discussion of these cases, see Appendix D.)

The entire questionnaire, consisting of a cover note, consent form, and demographic, stress, and torture sections, can be found in Appendix B. The English-language equivalent is in Appendix C.

Subjects

There were several criteria for participants in this study, covering country of origin, immigration status, age, gender, and psychotherapy history.

The sample population for this study consisted of persons raised in Central and South America who were refugees in the United States. Participants had to have

been 18 or older at the time they left their countries. Although the United States is home to refugees from many parts of the world, including countries in which torture is practiced (e.g., the Middle East, IndoChina, and parts of Africa), a desire to minimize the effects of culture on the experience of stress led to the focus on persons from Latin America. Cultural difference do exist among the countries that make up Latin America (just as they do within those countries), but it is likely that such differences among countries of one continent are lesser than those between countries of one continent and those of another.

Since it is to be expected that psychotherapy would have positive effects on a refugee's experience of stress, the sample population for this study was restricted to persons who have had at most one or two therapy sessions. (Often, a first session would be for assessment rather than therapy, the assessment report to be used at an immigration hearing in support of a request for asylum.)

This study examined only male refugees. It is not known whether men and women react differently to torture, but it is known that women are subject to some different forms of degradation and torture, specifically sexual assaults, that may have different psychological meanings and effects (Agger, 1989). To consider this factor, the sample size would have to double, to allow for the necessary gender comparisons. Without significant financial or institutional resources to conduct a study that would penetrate this hard-

to-reach population, it was decided to limit the study to members of one gender; males were chosen in the expectation that more survivors of torture would be found among them.

Contacts with Hispanic refugee service organizations were made, and permission was received to interview their clients. Such contacts were a major source of subjects for the study. Naturally, these subjects were likely to be relatively recent arrivals. Refugees who have been in the United States for a number of years are unlikely to be current users of the services of refugee service organizations.

Finding the non-recent refugees is a more difficult task. Such persons would most likely be from countries that experienced major political upheaval and human rights abuses, and thus created large numbers of refugees, more than ten years ago. Several countries (Brazil, Chile, Argentina and Uruguay) meet that criteria (Weschler, 1990). Contact could be made with them through their local cultural organizations. Because the language of the instruments used in this study was Spanish, while the native language of Brazil is Portuguese, no search was made for a local Brazilian community. For the remaining three countries, an active cultural organization local to the Los Angeles area was found only for Chilean emigres, possibly because the political situation in the other countries has been reversed earlier and more fully in those countries then has been the case in Chile. In addition, even in the absence of

significant numbers of returnees, one would expect membership in such organization to ebb over time due to their members' dispersal or acculturation, ultimately leading to possible dissolution of cultural organizations.

Ethical issues

Care must be taken when enlisting the participation of any individuals in psychological research. This is especially the case in research designs that call for the manipulation of stimuli, as was unwittingly but amply demonstrated by Stanley Milgram. Even in studies that do not involve the application of experimental conditions to subjects, as this study does not, careful attention to the subjects is still required, especially when working with individuals expected to have psychological symptoms of any degree.

Since the hypotheses of this study predict that some of the subjects will be experiencing symptoms currently, the researcher is obligated to insure that participation in the study does not create additional pathology, and that procedures are available to deal with manifestations of already existing symptoms that might be engendered by participation. This means not only that those involved with the study must be sensitive to the subjects' possible pathologies, but specifically that they be prepared to respond positively should symptoms appear or become exacerbated during participation in the study, e.g., by discontinuing the interview or suggesting appropriate

treatment referrals.

Torture victims are different from other patients in that symptoms can be evoked by stimuli that appear ordinary and unremarkable to therapists and other patients. Situations evocative of the torture setting can bring about intense anxiety, intrusive, painful recollections, or withdrawal and avoidance behavior. Such stimuli might include small, bare waiting rooms; uniforms, including medical uniforms; or instrumentation resembling torture instruments, such as medical equipment. Thus, researchers (and therapists) must take care to be prompt, friendly rather than distant or official, and be dressed in normal rather than laboratory clothes or uniforms.

Measures taken to protect subjects, along with the usual informed consent and a full description of the demands that will be placed upon participants, should include the availability of referrals for those not currently in treatment. Referrals must be to a facility specifically prepared to treat victims of torture, who need care-givers trained in the unique needs of these patients, as noted above. Finally, the researcher must be aware of and responsive to these unique factors when designing the study's protocols, meeting with the subjects, and performing the research.

All protocols for approaching and interacting with potential subjects were reviewed and approved by the Michigan State University Human Subjects Committee.

Procedure

Agencies involved with local refugee clients were the major source of subjects for this study. Additional sources of subjects were cultural groups and individuals involved with the treatment of torture survivors.

Participants were provided with a list of low-cost or free service providers comprising legal, medical and counseling services. Included on the list was a referral to a local torture treatment program (which is one of very few such programs on the continent, or indeed worldwide). All participants, from whatever source, were made aware of the services of the torture rehabilitation program as a matter of course. This precaution is advised because it is not uncommon for refugees to pass through immigration and social service agencies without the potential of torture being considered by agency staff and without it being raised by a hyper-cautious or withdrawn survivor (Kenzie, Fredrickson, Ben, Fleck, & Karls, 1984).

Interviews included signing informed consent agreements and completing the research measures. Each subject was given a copy of the informed consent sheet which included the researcher's name and phone number.

Pre-test.

A small pre-test was conducted, consisting of two administrations of the questionnaire. The purpose of the pre-test was to insure that each part of the questionnaire could be readily understood and the instructions easily

followed. On the basis of this pre-test, a few phrases were changed to accommodate subjects with limited reading ability. No other difficulties were detected.

Data Analysis

Confounding of variables.

Because of political history (i.e. the dates during which various Latin American countries underwent political upheaval, repression, or civil war), recent refugees tend to be Central American, while non-recent refugees tend to be South American. Because of this historical fact, the earliest arrivals, who would go into the non-recent group, were overwhelmingly South American, while the most recent arrivals were overwhelmingly Central American. This confounding of region and recency means that conclusions drawn about the effects of time might in fact be conclusions that should be drawn about regionality (regionality being whatever factors differentiate Central Americans [Salvadorans and Guatemalans] from South Americans [Chileans and Argentineans]).

Assessing confounding factors.

To unravel a part of this confounding, an additional level in the recency factor was created by dividing the most recent group into very recent and middle recent groups. In the resulting three-level factor, the two most recent of the recency groups would, because of the above-mentioned political history, contain subjects solely from Central America, South Americans falling only in the non-recent

group. A comparison could then be performed on the effects of recency within just the very recent and middle recent groups, thereby eliminating the influence of either regionality or education, while retaining, in a somewhat more restricted range, the effects of time.

As the data were being collected, examination of the questionnaires revealed that the dimension "torture--no torture" also could be expanded from two to three levels. The no-torture population could be subdivided into two groups: Those who experienced specific dangers other than torture (detention, death threats, or death threats against or arrests of family members or friends), and those who did not. These three levels (torture, other specific dangers, other non-torture) would seem to form a meaningful continuum along the original torture--no-torture dimension. (Actually, when the data is analyzed using an analysis of variance model, there is no requirement that the three levels lie along a continuum. The concept of a continuum for these three groups is speculative, based upon apparent face validity.) Thus, it would seem reasonable to expand the two-by-two design (or, with the additional recency level, the three-by-two design), to a three-by-three design.

H1: Stress in Torture-exposed vs. Non-exposed Refugees

Stress level scores were collected from refugees who reported having been exposed to torture and from refugees who do not report such exposure. Hypothesis H1 posits that the mean stress scores of these two groups will be

significantly different, and that the exposure group will have a higher mean. Using the 3x3 ANOVA model, a planned contrast comparing the torture-exposed group with the two non-exposed groups across all three recency levels was performed.

H1a: Stress and Degree of Exposure

This hypothesis is more exacting than the first hypothesis. Here the question is not simply whether the mean stress score of the non-exposure group is lower than that of the exposure group, but whether a (linear) correlation exists between the two scores (degree of exposure and stress). Statistically, the question is simply: is there a significant correlation between these two scores? A correlation between exposure and stress scores was computed to address this hypothesis.

H2: Stress over Time: Exposure vs. Non-exposure Groups

This hypothesis considers the effects of time on stress levels. The hypothesis has two parts: (**H2a**) among refugees not exposed to torture, those who have been in exile for a longer period of time will have significantly smaller stress scores than those who have more recently begun their exile; and (**H2b**) among refugees who have been exposed to torture, those who have been in exile for a longer period of time and those who have more recently begin their exile will not differ significantly in their stress scores.

Members of each exposure group were divided into subgroups based on the length of time they have been in

exile. Using the 3x3 ANOVA model, the statistical description of these two related hypotheses can be stated as follows: (i) There will be a main effect for torture exposure; (ii) There will be a main effect for Recency; (iii) there will be an interaction between the two factors; and (iv) the cell means will show higher stress in the exposed groups than in the non-exposed groups, with the highest means in all recency levels of the exposed groups.

To clarify the relationship between this set of hypotheses and the statistical tests, Table 1 shows the hypothesized outcome for a simplified 2x2 design (recent and non-recent; exposed and non-exposed).

Table 1

Hypothesized 2x2 Matrix of Stress Scores

	Torture	Non-Torture
recent	very high stress	high stress
non-recent	very high stress	low stress

The meaning of each of the statistical tests mentioned above can readily be understood by reference to this matrix. Clearly there would be a main effect for torture, i.e. the mean stress score in the torture exposed column would be higher than that of the non-exposed column. Likewise, the mean score for the recent row would be higher than that for the non-recent row, indicating a main effect for recency.

Because the difference in means between each level would not be constant, an interaction would exist (Hays, 1973, pp. 496-498). Finally, of course, since the existence of a main effect does not convey the direction of that effect, the cell means would be examined for the proper trends.

Political Activity.

Some anecdotal data has suggested that those who know why they have been arrested (i.e. those who have been politically active) cope better with the experience of torture than do those to whom their arrest seems mistaken. Although no studies have been performed to investigate this theory, it does have face validity.

A physician, while a prisoner at a torture center, was able to provide some treatment to his fellow torture victims. He observed that those who were involved politically (before their arrest) coped better with torture. By "involved" he meant "more militant" as opposed to simply being for or sympathetic to a particular political party, and more aware of the universality of political events, rather than seeing them as just something happening in their country. He noted that the more politically involved were stronger in accepting the torture being done to them, expressing such attitudes as "well, they didn't kill me, who cares how many times they take me [for interrogation and torture]," while those less politically involved felt "I shouldn't be here" and felt isolated and weaker. This isolation or lack of communication with fellow prisoners may

have come from, or been strengthened by, a fear of communicating with other prisoners, this fear stemming from the belief they were being watched. (A. Quintana, personal communication, September 4, 1991.) Another refugee treated his arrest and torture very philosophically. He stated that he felt (both at the time and currently) that he suffered relatively little abuse compared to what he knew was happening to others, that he was a "small peanut." (Name withheld, personal communication, May 21, 1991.)

A question about one's level of political activity was included in this study to investigate whether an effect for political activity might be detected. A *t*-test for the difference in stress means between more- and less-active torture survivors was computed.

Results

Questionnaires were completed by 109 subjects who fulfilled all criteria for inclusion in the study. One-quarter of these subjects (27) reported having been tortured.

Most subjects required less than 20 minutes to read the materials, ask any questions, complete the questionnaire, and receive a handout listing referral sources. In some cases limited reading skills lengthened the duration of a session to 30 or 40 minutes (for some Central Americans, Spanish is a second language, quite foreign to a native Indian language).

Some sessions lasted up to an hour, due to discussion between the researcher and the subject before, during and especially following the completion of the questionnaire. These discussions typically provided the researcher with further information about the refugee's experience under torture, or the experience of flight and resettlement. They also provided the refugee with an opportunity to talk with a third party who was not only understanding but also professionally informed and could provide helpful and supportive feedback about their experience of stress and distress since their trauma. These talks also provided the researcher with the opportunity to provide some information to the refugee about the role and benefits of psychotherapy (which often were unknown to the refugee), in addition to the usual providing of referral information. Those starting

or considering counseling were given specific support to follow through. (Because of lack of information among their peers, such support was often absent in their usual circles.)

Table 2 shows the distribution of the 109 subjects by country. Three-quarters of the sample were Salvadoran, the remaining quarter split almost evenly between Guatemalans, on the one hand, and Chileans and Argentineans, on the other. The Salvadorans tended to be the youngest of the four groups (comparing age at time of arrival in the U.S.). The South Americans (Chileans and Argentineans) generally had more formal education. Of those subject to torture, the Central Americans tended to have a shorter ordeal.

Table 2

Demographic Profile

Item	Country				
	AR	CH	ES	GM	All
Current age	52.9 (4)	43.7 (10)	30.6 (83)	35.5 (12)	33.1 (109)
Years in the U.S.	12.6 (4)	14.2 (10)	3.8 (83)	4.6 (12)	5.2 (109)
Age when arrived	40.2 (4)	29.5 (10)	26.8 (83)	30.9 (12)	30.0 (109)
Occupation in L. Am.	4.8 (4)	3.5 (10)	2.9 (81)	2.5 (11)	3.0 (106)
Education in L. Am.	4.5 (4)	4.0 (10)	3.4 (80)	3.1 (12)	3.5 (106)
Political activity level	1.8 (4)	2.4 (10)	1.5 (83)	1.8 (12)	1.6 (109)
Days of torture	47.0 (3)	26.0 (8)	8.9 (13)	5.3 (3)	17.8 (27)

Note. The number of subjects in each category is shown in parentheses. Country abbreviations are: AR, Argentina; CH, Chile; ES, El Salvador; GM, Guatemala. The questionnaire (Appendix B and C) defines the numerical levels for Occupation, Education, and Political Activity.

Confounding of variables.

Examination of Table 2 shows that there exist at least two confounding factors in the recent--non-recent continuum. As noted earlier, political history had created the condition that the recent refugees were overwhelmingly Central American. This is evident in the table, in the row labeled "Years in the U.S.," which shows a mean of well under 10 years for the Central Americans but of 12 to 14

years for the South Americans.

The table also shows that the South Americans in this sample were generally better educated than were the Central Americans. A t-test showed that this difference was significant (with 104 dF, $t = 2.261$, $p < 0.05$). Education, then, in addition to region, could be confounded with recency. (Because education is often correlated with other factors, e.g., income, social and political views, etc., one or more of these factors might be the confounding variable.)

One unmeasured but potentially relevant difference between the South American refugees and those from Central America concerns the additional trauma and stress that can occur in the process of reaching the United States. Some South Americans lived in difficult conditions in a country of first refuge, often Peru, before arriving in the United States; others arrived directly. Most of the Central Americans, it can be assumed, made their way through Mexico to the United States, a passage made difficult for many not only by their poverty but also by the exploitation (noted earlier in the literature review) they often had to endure. This difference in journey trauma could result in a greater degree of stress among the Central Americans than among their South American counterparts.

An additional source of confounding, not evident from the table alone, was created by the process of contacting subjects, and by the nature of the stress questionnaire. That questionnaire asks about the frequency, during the

previous seven days, of thoughts and feelings concerning an event. Most participants in this study were contacted through refugee service agencies. Usually they were told about the study, and asked to participate, while waiting for services. Those who chose to participate did so right then. Some subjects, however, especially the non-recent refugees, were contacted individually, either in person through the introduction of a third party, or by phone following a contact by a friend of that person who knew of this study. In most of these cases, arrangements would be made for the questionnaire to be administered at some future time, ranging from later that day to, more often, some days or even weeks later. This preliminary contact would serve to remind the subject of his reason for becoming a refugee, and could be expected to generate thoughts and feelings about it that might not have occurred had the contact not been made. Thus, when answering questions about frequency of events "during the past seven days," responses might be artificially inflated due to contact with the researcher. This effect would occur non-randomly across subjects, i.e., mostly in the non-recent population.

Interestingly, evidence for the effects of such early contact does not appear in the collected data, in that many of the non-recent torture survivors claimed little or no stress symptoms. (The data discussed here is introduced in Table 3, three pages below.) Among the non-torture non-recent refugees, however, stress symptoms were markedly

higher, which could allow for the possibility of inflation due to early researcher contact. Under these circumstances, such inflation, if it occurred, would seem to interact with torture exposure. In the absence either of evidence for general inflation or of a theory that would account for differential impact on the torture and non-torture groups, the possibility of early-contact induced bias is simply noted.

Assessing confounding factors.

To examine the effects of time without the regional effects, an analysis of variance was performed contrasting just the first two levels of the new recency dimension (the Central Americans) across all levels of the exposure to torture factor.

The fewest number of months that a South American refugee has been in the United States was 116 (9 years, 8 months), so this figure was taken to define the beginning of the non-recent group.

The remaining portion of the recency dimension was divided into two levels, very recent (under 2 years, i.e., 0 to 23 months) and recent (2 years to 9 years, 8 months, i.e., 24 to 116 months). A disproportionate number of subjects in the sample had arrived in the U.S. within the last two years, and relatively fewer in the previous several years. A dividing point of two years was chosen, rather than a more centrally located five years, in the interest of providing the relatively smaller torture-exposed group with

a reasonable number of subjects in each of the two new recency levels, very recent and recent. It is unknown whether the effects of time are best seen after two years, five years, or some other length of time; two years seemed neither too short nor too long a period for a hypothesized diminution of stress to begin to have an effect. It certainly seemed no worse to establish this period, so as to provide statistically meaningful cell sizes, than to divide the two periods at either the median of the sample or the middle of the range, as neither approach (cell size, median, or mean) has any basis in the theory of stress and stress reduction; all are chosen solely for statistical usefulness.

The second approach to examining the issue of confounding deals with the possibility of the confounding variable being education rather than (or in addition to) region. Members of the South American group were better educated than were members of the two recent groups. Within each of the recent cells a *t*-test can be applied to that cell's data to determine whether the more educated subjects within that cell have a different mean stress score than do the less educated subjects. If they do, then it would be reasonable to assume that the stress levels in the non-recent group, which includes mostly well-educated subjects, would be systematically affected by their educational level. The failure to find an effect for education would suggest that any confounding due to region may involve factors other than educational level.

Two sets of tests were conducted: one compared subjects with a secondary or lesser education to those with vocational or university educations; the other compared subjects with a vocational or lesser education to those with university educations. A comparison of the stress means between only more- and less-educated torture-exposed Central Americans (i.e., in each of the two "recent" groups) was not possible because of the small number of torture survivors in the middle recency group (one of the two education levels had only one subject). Assuming that any effects of education on stress would also occur in the other, non-torture groups, a *t*-test was computed to compare the stress means of members with different education levels in all cells containing only Central Americans, i.e., all levels of the exposure factor in the first two recency levels of the recency factor. If education has a mitigating effect on stress, it could be visible within a cell's otherwise homogeneous (all Central American) subjects. These tests failed to be significant.

Hypotheses **H1** and **H2** each concerned the mean stress found in refugee torture survivors. An analysis of variance, with factors recency and torture, would test hypothesis **H2**. As noted earlier, the factors were divided into three levels each, resulting in a 3x3 matrix. The mean stress scores in each cell are shown in Table 3.

Table 3

Torture x Recency

	Torture	Non-T Dangers	Other Non-T
0 to 23 months	N: 11 Mean: 46.27 Range: 30-65 S.D.: 12.20	N: 16 Mean: 33.25 Range: 0-65 S.D.: 19.60	N: 18 Mean: 25.78 Range: 0-57 S.D.: 15.70
24 to 115 months	N: 5 Mean: 44.40 Range: 25-63 S.D.: 16.02	N: 21 Mean: 29.71 Range: 0-61 S.D.: 19.89	N: 16 Mean: 16.38 Range: 0-56 S.D.: 18.68
116 or more months	N: 11 Mean: 14.40 Range: 0-46 S.D.: 16.84	N: 5 Mean: 30.40 Range: 15-41 S.D.: 10.36	N: 6 Mean: 5.33 Range: 0-16 S.D.: 7.26

Analysis of variance of the full 3x3 matrix, using a 2-way ANOVA with fixed effects, yielded the following statistics: (i) the main effect for the factor torture was significant ($p < .001$); (ii) the main effect for the factor recency also was significant ($p < .001$); and (iii) an interaction was not found ($p = 0.08$). Of the two factors, torture had the greater effect (i.e. the larger F ratio). Complete statistics for all ANOVA comparisons are shown in Appendix E. (A computer program to maintain a data base of questionnaire responses, and to compute descriptive statistics, correlations, and t-tests, was written by the author. The analyses of variance were computed using the GANOVA computer program that accompanies the textbook on experimental design by Woodward, Bonett and Brecht, 1990.)

Table 4, below, shows the numbers of Central Americans and South Americans in each of the new recency levels.

Table 4

Nationalities in the Torture x Recency Matrix

	Torture	Non-T Dangers	Other Non-T
0 to 23 months	C. Am.: 11 So. Am.: 0	C. Am.: 16 So. Am.: 0	C. Am.: 18 So. Am.: 0
24 to 115 months	C. Am.: 5 So. Am.: 0	C. Am.: 21 So. Am.: 0	C. Am.: 16 So. Am.: 0
116 or more months	C. Am.: 0 So. Am.: 11	C. Am.: 2 So. Am.: 3	C. Am.: 6 So. Am.: 0

A correlation between stress and days of torture for the torture-exposed group was computed. The correlation, -0.33, was not significant. Once again, however, the recency-region confounding exists. In the case of days of torture, the mean number of days for the Central American groups was considerably smaller than for the South American group (47 and 26 for the Argentines and Chileans, respectively; 9 and 5 for the Salvadorans and Guatemalans, respectively). This confounding cannot be separated, so correlations between stress and days of torture were computed separately for each recency level. Only the correlation for the most recent group was significant ($r = 0.61$, $p = .05$).

To consider the effects of political activity on

stress levels, *t*-tests were computed for the difference in mean stress scores between subjects with higher (2 or 3) and with lower (1) levels of political activity. That measure of political activity failed to distinguish between subjects with higher and lower levels of stress, either for the sample as a whole or among only the torture survivors.

A contrast was performed to determine whether the differences in stress among the three non-recent groups was significant. The result ("Contrast, Torture, all levels, for the third level [only] of Recency" in Appendix E) was not significant, $p = 0.0537$.

Discussion

The most conspicuous fact to emerge from this data is that many members of this sample of male Hispanic refugees, even those who began their exile a decade ago, experience a large number of symptoms of post-traumatic stress. High stress levels can be found regardless of the reason for exile. In many cases these symptoms last for years.

The experience of torture has a significant effect on stress, but the direction of that effect changes over time. Although, for the more recent refugees, stress was greatest among the torture survivors, the hypothesized trend in these differences (consistently greater stress in the torture exposed group than in the other groups) did not persist over time. The mean stress level of refugees who had been in the U.S. for ten or more years was higher than that of only one, rather than of both, of the other two long-term non-torture groups. Two comments may be made. First, in such a case one would look for a significant interaction, but in this analysis the interaction effect was not statistically significant. The failure to find significance in the experimental sample does not rule out the possibility that the interaction is significant in the population at large, and leaves open the possibility of differences between the effects on stress of torture and of other specific dangers after long periods of time. It is worth noting that the interaction was only slightly shy of significance. The relatively small sample size may have

been a factor in the failure to find a significant interaction.

Second, as noted earlier, the non-recent group might be contaminated with a relevant bias, since the members of that group are drawn mainly from South America, while the other groups are almost exclusively Central American. One factor that may affect outcome is educational level, which is differentially distributed among the two American groups.

Educational levels were significantly different between the South and Central American refugees. If education has a mitigating effect on stress, that effect could be visible within the Central American population alone. No influence of education on stress within that population was found, weakening any suggestion that the decreased stress among South American torture survivors could be explained by their higher educational level.

It seems anomalous that, after ten years, stress levels would drop among the torture survivors, but not among those who experienced specific (non-torture) dangers. What can account for this anomaly? The difference in stress means among the three non-recent exposure groups was not found to be significant; however, in view of the small sample sizes at the non-recent level, and the probability level for the difference of the means being so close to significance, the likelihood is that the failure to find an effect was indeed a failure to find, rather than the absence of an effect. Further research, looking in more detail at the differences

between these groups of long-term refugees, could prove valuable in clarifying this issue.

The corollary to the first hypothesis was that a measure of torture exposure might be found in the number of days of torture experienced. The correlation between stress and this measure of exposure was not significant; even when looking at each recency group separately, so as to separate the Central Americans (who had "lower" exposure, according to this metric) from the South Americans, only the most recent group showed a significant correlation. At best this suggests that this unsophisticated measure of exposure might be of use in the first year or two following the trauma. More likely is the conclusion that, as discussed earlier, the concept of exposure is too complex for it to be estimated by so simple a metric. As a post hoc comparison, more complex estimates of exposure were looked at: The product of the number of days and the number of torture practices experienced, the square root of that product (to improve linearity), and the natural log of the product. None of these measures provided a statistically significant correlation with stress level. It is likely that several additional aspects of the experience of torture, probably including more psychologically based factors, are required to provide a measure of exposure that has theoretical and practical meaning.

Looking once again at the stress levels in Table 2, what is striking is that, except for the non-recent,

specific-danger cell, there is a distinct pattern: stress is highest among the most recent, most exposed group, and decreases both with time and with lesser exposure (considering the torture, specific danger, other danger categories as points on a continuum of exposure to trauma). The question arises: What is special about the "specific danger" category that results in the maintenance of uniformly high stress levels across time? The "specific danger" group is the only group that would seem to meet the criteria for post-traumatic stress disorder regardless of how long ago the trauma occurred. The other two groups also begin their exile with high stress levels, but both decline over time, especially after ten years. Why does the "specific danger" population experience chronic symptoms? It is not clear what additional factors differentiate them from the other two groups. Further research which includes clinical interviews aimed at eliciting any relevant differences would be very helpful.

Similar research, focused on the torture survivors who have been in exile longer than a decade, could elucidate the reasons that stress among this untreated population was <u>not</u> chronic. Such information would be useful both for treatment of recent survivors and in advancing understanding of post-traumatic stress.

Other information gathered during the study may be useful for mental health professionals working with refugee populations. It was exceedingly rare for a refugee to

indicate that he had received psychological counseling. This is remarkable considering the very high levels of post-traumatic stress found among the recent refugees. Many factors probably conspire to produce this low rate. One factor must be the limited availability of low-cost, Spanish-speaking service providers. Another factor, however, is likely to be education; these refugees may not be aware of the benefits of psychological intervention. Many may not even be aware of the need for it: given the decade of civil war in El Salvador and the chronic stress it surely induces, many people may not know that their symptoms <u>are</u> symptoms, seeing them rather as usual aspects of life (Fischman & Ross, 1990). Overcoming both the education and availability problems will not be easy. On the other hand, the high level of stress among all recent refugees, and among many longer-term refugees, speaks for the great need to address this mental health problem.

Tests of the effects of levels of political activity on post-traumatic stress failed to produce significant results. Perhaps there is no support for this anecdotal data, or perhaps a more accurate measure of political activity is required.

In summary, this research has found substantial symptoms of stress among recent Latin American refugees, in many cases continuing for years. Stress was found to be significantly affected both by the passage of time and by the type of exposure (torture, other specific dangers,

general dangers): torture results in significantly higher levels of stress; the passage of sufficient time tends to mitigate stress. The effects of time varied among the three exposure groups: Those in the torture and general danger groups showed a decrease in symptoms over time (but only after a decade for the torture exposed group; more uniformly in the "general danger" group), and no effect of time was found in the "specific danger" group. Interpretation of these findings was complicated by the unavoidable confounding of time with nationality. No effect of educational level on stress was found. The use of the number of days of torture was not found to be a useful measure of torture exposure, in the sense that it failed to predict stress outcome. One's level of political activity was not found to have an effect on stress levels.

APPENDIX A

Backtranslation of the Impact of Events Scale

Appendix A

Below are the texts of the Impact of Events Scale and the English backtranslation of the Spanish-language version. Note that these are the texts only, i.e. they are not in the format that includes the response boxes. (The Spanish-language version, in the format used during administration of the questionnaires, appears as part of Appendix B.) A discussion of differences between the two versions then follows.

<u>The English Version</u>.

Below is a list of comments made by people after stressful life events. Please choose a response indicating the frequency with which these comments were true for you DURING THE PAST SEVEN DAYS. If they did not occur during that time, please mark the "not at all" column.

Frequency: Not at all; Rarely; Sometimes; Often.

1. I thought about it when I didn't mean to.
2. I avoided letting myself get upset when I thought about it or was reminded of it.
3. I tried to remove it from memory.
4. I had trouble falling asleep or staying asleep.
5. I had waves of strong feelings about it.
6. I had dreams about it.
7. I stayed away from reminders of it.
8. I felt as if it hadn't happened or wasn't real.
9. I tried not to talk about it.

10. Pictures about it popped into my mind.

11. Other things kept making me think about it.

12. I was aware that I still had a lot of feelings about it, but I didn't deal with them.

13. I tried not to think about it.

14. Any reminder brought back feelings about it.

15. My feelings about it were kind of numb.

Backtranslation.

(Note: in some places, the translator provided two alternative translations, separated by a slash, the first alternative being more literal, the second more natural.)

Below is found/you will find a list of comments made by people after experiencing stressful events in their life. Please choose a response indicating the frequency with which these comments were true in your case DURING THE PAST SEVEN DAYS. If they did not occur during that time, please choose the column indicating "Never."

Frequency: Never; Rarely; Sometimes; Frequently.

1. I thought about it when I didn't want to.

2. I avoided becoming upset/irritated when I thought about it or when I remembered it.

3. I tried to eliminate/erase it from my memory.

4. I had problems going to sleep or staying asleep.

5. I had moments of strong feelings about it.

6. I had dreams about it.

7. I avoided things that would remind me of it.

8. I felt as if it hadn't happened or as if it weren't

real.

9. I tried not to talk about it.

10. Images of it sprang up on my mind.

11. Other things made me think about it.

12. I was aware that I still had many feelings about it but I didn't put up/deal with them.

13. I tried not to think about it.

14. Any memory brought back to me feelings about it.

15. My feelings about it were a little numb.

Discussion

The Impact of Events Scale consists of three parts: Four sentences comprising the instructions, the four response category descriptions, and the 15 stress symptom questions.

The backtranslation accurately reflects the original instructions, containing slight phrasing differences. The category descriptions are identical or fully synonymous.

The backtranslation of three of the items was identical to the original (items 6, 9 and 13); for four others (3, 8, 12 and 15), the differences were very slight (e.g. "I tried to remove it from my memory" vs "I tried to erase it from my memory"). In two other items (7 and 10) the backtranslation shows phrasings close to the original, in which the meaning seems to be unchanged. The backtranslation of the remaining four items show small deviations from the original that may be worth some comment.

The first item asks about thinking about something

"when I didn't mean to," which appeared as "when I didn't want to" in the backtranslation. The original ("didn't mean to") provides a more benign sense of Horowitz phase of intrusive thoughts than does the backtranslation ("didn't want to"). For unpleasant stimuli, instances of not wanting to think about something are probably also instances of not meaning to think about it; it is likely, but is not so clear, that the reverse is also true. Thus, the Spanish-language version, if it accurately reflects the backtranslation sense, might lead to a slight underreporting of symptoms for this item.

Item 2, in the original, refers to not becoming upset "when I thought about it or was reminded of it," which was backtranslated to "when I thought about it or when I remembered it." Likewise, in item 14 the original states that any "reminder" brought back feelings, whereas the backtranslation refers to any "memory." The person doing the backtranslation noted that the Spanish term recuerdo can have the sense of both a memory and a reminder.

In item 5 the difference revolves around the difference in meaning between "waves" and "moments," the rest of the statement being identical ("I had waves of strong feelings about it"). Where "moments" implies an event of sudden appearance, brief duration, and sudden disappearance, "waves" broadens the duration and softens the rate of onset and termination. That this would lead people to respond differentially to this item seems unlikely.

Item 11 shows a difference in that things "kept making me" think about something, while in the backtranslation things "made me" think about something. Here, where the original version can be seen as more restrictive than the backtranslation version, we have the opposite situation from what was seen with item one, leading to the possibility of some overreporting of symptoms for this question.

In summary, the backtranslation indicates that the Spanish version is faithful to the instructions, the response category headings, and all but four response items. Each of those fouritems, to the extent they differ meaningfully at all between the two versions, assess almost identical stress symptoms. One can conclude, therefore, that the Spanish-language version is a reasonably accurate rendition of the original English version.

APPENDIX B

Spanish-Language Questionnaire

Como saben, hay personas que son refugiados por muchas razones, como políticas, económicas, y de otra índole. Por mucho tiempo se ha sabido que ser refugiado puede producir sentimientos de tensión, y esa tensión puede hacer la vida de una persona más difícil. El tipo y la cantidad de tensión sufrida por diferentes refugiados, especialmente ésos que han sido víctimas de abusos contra derechos humanos, no es ampliamente conocida.

Este estudio se hizo para proveer esa información. Este reporte puede ser utilizado en el futuro para ayudar a que los refugiados se acostumbren a las circunstancias nuevas.

Su participación en este proyecto es muy apreciada, y cumplirá un papel fundamental para ayudar a otros en el futuro. Gracias.

Acuerdo de Participar en un Estudio

Se conduce un estudio por Stan Lieberson, un estudiante aspirando a un doc la Universidad del Estado de Michigan, para aprender más acerca de la tensión q refugiados latinoamericanos puedan sufrir al venir a Norteamérica.

Si yo estoy de acuerdo en participar en este estudio, se requiere que comp tres cuestionarios escritos. Se espera que el tiempo requerido para participar estudio será de aproximadamente 20 minutos.

Algunas de las preguntas en los cuestionarios podrían traerme recuerdos de experiencias desagradables y tensas que puedan ponerme en un estado emocional. embargo tengo el derecho de rechazar a contestar cualquier pregunta que yo dese conversar con el investigador si me siento indispuesto y en cualquier caso, el investigador me proveerá con una lista de organizaciones locales que proveen se legales de inmigración, servicios médicos y tratamientos sicológicos para los r

El investigador hará todo lo posible para mantener todo confidencial. Él nombre del cuestionario y mantendrá los nombres en código y los códigos bajo ll Cuando se termine el estudio los nombres serán destruidos. La confidencialidad protegida lo más posible dentro de la ley.

Yo no recibiré ningún beneficio directo en participar en este estudio. El investigador espera aprender más acerca de la tensión y los refugiados, así que posible que los resultados de este estudio ayuden a otras personas como yo en e

Yo he conversado con el Sr. Lieberson acerca de su estudio y él ha contest preguntas. Si tengo alguna otra pregunta, puedo llamarlo al (213) 654-4289. S puedo pedir un ejemplar de los resultados del estudio. Se me ha entregado un e este formulario de consentimiento.

La participación en este estudio es voluntaria. Yo puedo rechazar de part puedo retirarme en cualquier momento sin que afecte mi relación con cualquier o de la cual yo reciba tratamiento o servicios.

Firma: _____ Fecha: _____

Dirección y Número de Teléfono: _____

_____

Por favor complete las preguntas siguientes en el área designada:

¿Cuál es el país donde usted nació? _____

¿En cuál país fue usted criado? _____

¿En qué país vivía usted antes de venir a los Estados Unidos? _____

¿En cuál mes y año salió usted de ese país para venir a los Estados Unidos? ___ / 19___

¿En qué mes y año llegó usted a los Estados Unidos? ___ / 19___

¿En cuál mes y año nació usted? ___ / 19___

Gracias. Ahora por favor marque la respuesta más exacta:

¿Antes de venir a los Estados Unidos, cuál era su estado civil?
___ Casado ___ Divorciado
___ Soltero ___ Viudo

¿Antes de venir a los Estados Unidos, cuál era el nivel mas alto de educación que usted alcanzó?
___ Ninguno
___ Primaria ___ Secundaria
___ Educacion Vocacional (oficio)
___ Universitario

¿Antes de venir a los Estados Unidos cuál era su ocupación?
___ Estudiante
___ Desempleado
___ Empleado sin entrenamiento
___ Empleado experimentado
___ Director/Gerente o Profesional

¿Cuál es su estado civil actual?
___ Casado ___ Divorciado
___ Soltero ___ Viudo

¿Actualmente, cuál es el nivel de educación mas alto que usted ha alcanzado?
___ Ninguno
___ Primaria ___ Secundaria
___ Educacion Vocacional (oficio)
___ Universitario

¿Actualmente, cuál es su ocupación?
___ Estudiante
___ Desempleado
___ Empleado sin entrenamiento
___ Empleado experimentado
___ Director/Gerente o Profesional

¿Antes de venir a los Estados Unidos fue usted en alguna ocasión arrestado, detenido o secuestrado por la policía, las fuerzas armadas o algún otro grupo político?
___ Sí ___ No

¿Si contestó afirmativo, fue usted en alguna ocasión maltratado o abusado mientras estuvo detenido?
___ Sí ___ No

¿Que nivel de actividad política ejercía usted?
___ Muy Poco ___ Un Poco
___ Mucho

Por favor escoja o escriba la principal razón por la que se fue de su país.

__ Detención o amenazas contra miembros de mi familia o amigos, pero no contra mí.
__ Amenazas de muerte
__ Detención sin tortura
__ Detención y tortura
__ Problemas económicos
__ Otras razones: _____

¿Ha recibido alguna vez ayuda o terapia sicológica en relación a los problemas mencionados? ___ Sí ___ No

Si la respuesta es sí, ¿cuántas citas ha tenido con su consejero? ___

Las preguntas en la próxima página se refieren a la razón que se encuentra arriba. Por favor contéstelas con cuidado.

Abajo se encuentra una lista de comentarios hechos por personas después de experimentar acontecimientos de tensión en su vida. Por favor, escoja una respuesta indicando la frecuencia con que estos comentarios fueron verdaderos en su caso DURANTE LOS PASADOS SIETE DIAS. Si no ocurrieron durante ese tiempo, por favor escoja la columna indicando "Nunca."

Frecuencia: Nunca Raramente A veces Frecuentemente

		N	R	AV	F
1.	Pensaba en eso cuando no quería.	_	_	_	_
2.	Evité enfadarme cuando pensé en eso o cuando me acordé de eso.	_	_	_	_
3.	Traté de eliminarlo de mi memoria.	_	_	_	_
4.	Tuve problemas al dormirme o en mantenerme dormido.	_	_	_	_
5.	Tuve momentos de fuertes sentimientos acerca de eso.	_	_	_	_
6.	Tuve sueños sobre eso.	_	_	_	_
7.	Evité cosas que me recordaran de eso.	_	_	_	_
8.	Me sentía como si no hubiera ocurrido o como si no fuera real.	_	_	_	_
9.	Traté de no hablar sobre eso.	_	_	_	_
10.	Imágenes de eso surgieron en mi mente.	_	_	_	_
11.	Otras cosas me hacían pensar en eso.	_	_	_	_
12.	Estaba consciente que todavía tenía muchos sentimientos acerca de eso pero no lidiaba con ellos.	_	_	_	_
13.	Traté de no pensar en eso.	_	_	_	_
14.	Cualquier recuerdo me traía sentimientos de eso.	_	_	_	_
15.	Mis sentimientos acerca de eso estaban un poco entumecidos.	_	_	_	_

Si usted no ha sido detenido y maltratado, por favor regrese este cuestionario al entrevistador, sino continue.

- - - - - - - - - - -

En estas últimas dos páginas se le preguntará sobre sus experiencias cuando fue detenido. Es posible que le resulte difícil contestar estas preguntas. Por favor, tome su tiempo.

Por favor, trate de contestar todas las preguntas. Si, en alguna ocasión, encuentra que es muy difícil continuar, entonces vaya al final de la segunda página y conteste las últimas cinco preguntas, que son muy importantes.

Gracias.

Por cada artículo mencionado, escriba cuantas veces le ocurrió a usted, o escriba "sí" si no puede recorder cuantes veces le occurió, o escriba cero si no le occurió.

Métodos físicos:

___ Golpes (con las manos, puñetazos, pies o botas, u otros instrumentos).
Si su respuesta no fue cero, por favor escriba cuantas veces los golpes incluyeron:
___ La cabeza.
___ Genitales.
___ Falanga (las plantas de los pies).
___ Teléfono (golpear ambos oídos simultáneamente con las palmas de las manos).
___ Golpear la cabeza contra la pared o el piso.
___ Empujado en los escalones, o fuera de las ventanas, etc.
___ Piel expuesta a calor extremo (cigarrillos, cigarros, planchas calientes o llamas).
___ Tortura eléctrica.
___ Tortura de uñas (uñas arrancadas o agujas insertadas bajo las uñas).
___ Alguna otra forma de perforar la piel (cuchillos, agujas, vidrio, etc.).
___ Tortura de dedos (dedos apretados entre objetos de madera o metálicos).
___ Suspendido (colgado) por los brazos o las piernas.
___ Torcimiento de las articulaciones (brazos, piernas, caderas, cuello, etc.).
___ Jalar el pelo.
___ Jalar las orejas, la lengua o las articulaciones.
___ Presión sobre los ojos.
___ Agotamiento físico (forzado: estar parado por largos ratos, o en posiciones anormales o ejercicio excesivo).
___ Temperaturas anormales (frío excesivo o temperaturas calientes en las celdas o cuartos de detención).
___ Asfixia (obstrucción de respiración normal).
Si su respuesta no fue cero, por favor escriba cuántas veces occurrió:
___ Por agua.
___ Por agua contaminada (excrementos, vomitos, sangre, sobras de comida, etc.).
___ Por mordazas, bolsas, toallas.
___ Estrangulamiento.
___ Luces brillantes (forzado a mirarlas).
___ Privación de sueño (menos de 4 horas por día).
___ Privación de agua (ninguna por 2 días).
___ Privación de comida (ninguna, muy poca o comida ningún comestible por día).
___ Violación sexual.
Si su respuesta no fue cero, por favor escriba cuántas veces le incluyó:
___ Violación (incluyendo con los dedos).
___ Inserción de instrumentos.

(Por favor, pase a la siguiente página)

Por cada artículo mencionado, escriba cuántas veces le ocurrió a usted,

o escriba "sí" si no puede recorder cuantes veces le occurió,

o escriba cero si no le occurrió.

Métodos mentales:

___ Amenazas verbales de muerte.
___ Amenazas verbales de asalto sexual.
___ Amenazas verbales de mas torturas.
___ Amenazas verbales de daño a la familia o amistades.
___ Otras amenazas verbales:
(_____)
___ Fingir ejecuciones de uno mismo.
___ Fingir ejecuciones de otros.
___ Oír los gritos de otros siendo torturados.
___ Forzado a mirar la tortura de la familia o amigos.
___ Forzado a mirar la tortura de extraños.
___ La familia o amigos forzados a mirar la tortura de sí mismo.
___ Otras personas forzadas a mirar la tortura de uno mismo.
___ Forzado a tomar drogas (píldoras, líquidos, inyecciones, vapores o gases).
___ Forzado a estar con animales o insectos (mientras está encerrado en un cuarto, amarrado o encadenado).
___ Interrogatorios constantes (más de 8 horas durante un periodo de 24 horas).
___ Cambio de actitud del interrogador (volviéndose "amistoso", prometiendo comida, favores especiales o poner fin a la tortura).
___ Confinamiento solitario.
___ Vendar los ojos.
___ Sonidos fuertes prolongados.
___ Abuso verbal (repetición de insultos ásperos o toscos).
___ Forzado a comer excrementos.
___ Desnudez (durante detención o interrogatorio).

Otros métodos:

___ _____
___ _____
___ _____

- - - - - - - - - - - - - - - - - - -

Finalmente, por favor conteste estas últimas preguntas:

¿Por cuántos días (el total de todas las detenciones) fue usted detenido? ____

¿En cuántos de esos días occurrieron los artículos arriba mencionados? ____

¿En qué mes y año terminó el maltrato? ___ / 19___

¿Durante este tiempo fue usted forzado a hacer o decir algo que usted no deseaba, o en el cual no creía, por ejemplo: firmar un documento, denunciar a alguien, identificar a una persona o grupo, o prometer hacer o no hacer o decir algo en el futuro? ___ Sí ___ No

¿Antes de ser detenido, su nivel de actividad política era?

___ Muy Poco ___ Un Poco ___ Mucho

APPENDIX C

English-Language Questionnaire

As you know, people become refugees for many reasons, such as political, economic, and other hardships. It has been known for a long time that being a refugee can produce feelings of stress, and that stress can make a person's life more difficult. The kind and the amount of stress experienced by different refugees, especially those who may have been the victims of human rights abuses, is not well known.

This study is intended to provide that important information. This information can be used in the future to help refugees adjust to their changed circumstances.

Your participation is greatly appreciated, and will play a role in helping others in the future. Thank you.

Consent to be in a Research Project

A study is being conducted by Stan Lieberson, a doctoral student at Michigan State University, to learn more about the stress that may be experienced by Latin American refugees who have come to North America.

If I agree to be in this study, I will be asked to complete two or three written questionnaires. The time needed to participate in this study is expected to be less than 20 minutes.

Some of the questions contained in the questionnaires may remind me of unpleasant or stressful experiences, and that may make me emotionally upset. However, I have the right to refuse to answer any question I choose. I am free to talk with the researcher if I feel upset, and in any case the researcher will provide me with a list of local organizations that provide legal (immigration) services and medical and psychological treatment for refugees.

The researcher will do everything possible to protect my privacy. He will separate my name from the questionnaires and will keep the names coded and the code locked. When the study is over, the names will be destroyed. My confidentiality will be protected as fully as possible within the law.

There will be no direct benefit to me from participation. The researcher hopes to learn more about stress and refugees, so the outcome of this study may help others like me more directly in the future.

I have talked with Mr. Lieberson about this study and he has answered my questions. If I have other questions, I may call him at (213) 654-4289. I may request a copy of the research results if I like. I have been given a copy of this consent form.

Participation in this study is voluntary. I may refuse to participate or may withdraw at any time without affecting my relationship to any organization from which I receive services.

Signature: _____ Date: _____

Address and Telephone: _____

Please fill in the blanks to complete the following questions:

What is your country of birth? _____

In which country were you raised? _____

In which country were you living before you decided to come to North America? _____

In what month and year did you leave that country for North America? _____ / 19_____

In what month and year did you arrive in North America? _____ / 19_____

In what month and year were you born? _____ / 19_____

Thank you. Now please mark the most accurate answer:

Before you left for North America, what was your marital status? ___Married. ___Divorced. ___Single. ___Widowed.

Before you left for North America, what was the highest educational degree you had received? ___None. ___Primary. ___Secondary. ___Vocational. ___University.

Before you left for North America, what was your occupation? ___Student. ___Unemployed. ___Unskilled worker. ___Skilled worker. ___Manager/Professional.

What is your current marital status? ___Married. ___Divorced. ___Single. ___Widowed.

What is the highest educational degree you have now? ___None. ___Primary. ___Secondary. ___Vocational. ___University.

What is your current occupation? ___Student. ___Unemployed. ___Unskilled worker. ___Skilled worker. ___Manager/Professional.

Before coming to North America, were you ever arrested, detained or kidnapped by the police, army, or other political groups? ___Yes. ___No.

If yes, were you ever mistreated or abused while you were detained or being held? ___Yes. ___No.

How politically active were you? ___Little. ___Some. ___Very.

Please check or write the main reason that led to your leaving your country:

__ **Arrest or threats against family members or friends, but not against me.**

__ **Death threats**

__ **Arrest without torture**

__ **Arrest and torture**

__ **Economic problems**

__ **Other reasons:** _____

Have you ever received psychological counseling or psychological therapy to help you with the issue that you checked above?

___ **No.** ___ **Yes.**

If yes, then about how many meetings have you had with your counselor? ____

The questions on the next page refer to the reason, noted above, that led to your being a refugee in North America. Please answer them carefully.

Below is a list of comments made by people after stressful life events. Please check each item, indicating how frequently these comments were true for you DURING THE PAST SEVEN DAYS. If they did not occur during that time, please mark the "not at all" column.

Frequency:	Not at all	Rarely	Sometimes	Often	N	R	S	O
1. I thought about it when I didn't mean to.					_	_	_	_
2. I avoided letting myself get upset when I thought about it or was reminded of it.					_	_	_	_
3. I tried to remove it from memory.					_	_	_	_
4. I had trouble falling asleep or staying asleep.					_	_	_	_
5. I had waves of strong feelings about it.					_	_	_	_
6. I had dreams about it.					_	_	_	_
7. I stayed away from reminders of it.					_	_	_	_
8. I felt as if it hadn't happened or wasn't real.					_	_	_	_
9. I tried not to talk about it.					_	_	_	_
10. Pictures about it popped into my mind.					_	_	_	_
11. Other things kept making me think about it.					_	_	_	_
12. I was aware that I still had a lot of feelings about it, but I didn't deal with them.					_	_	_	_
13. I tried not to think about it.					_	_	_	_
14. Any reminder brought back feelings about it.					_	_	_	_
15. My feelings about it were kind of numb.					_	_	_	_

If you were not detained, then please stop now and return this questionnaire to the researcher. Otherwise, please continue.

- - - - -

In these last two pages, you will be asked about your experiences while you were detained.

You may find it difficult to answer these questions. Please take your time.

Please try to answer all of the questions. If, at some point, you find it is too difficult to go on, then please skip to the end of the second page, and answer the last five questions there, which are very important.

Thank you.

For each item below, please write the number of times it happened to you, or just write "Yes" if you cannot remember the number of times, or write a zero if it did not happen to you.

Physical methods:

_____ Beatings (being struck, e.g. by hands, fists, feet or boots, or instruments).
If your answer was not zero, please write the number of times the beatings included:
  _____ Head.
  _____ Genitals.
  _____ Falanga (soles of the feet).
  _____ Telefono (simultaneous beating of both ears with palms of hand).
_____ Banging the head against the wall or floor.
_____ Pushed down stairs, out of windows, etc.
_____ Skin subject to extreme heat (cigarettes, cigars, hot irons, flames).
_____ Electric torture.
_____ Nail torture (nails torn off or pins inserted under nails).
_____ Other piercing of skin (knives, pins, glass, etc).
_____ Finger torture (finger squeezed by wooden or metal objects).
_____ Suspension by arms or legs.
_____ Twisting of joints (arms, legs, hips, neck, etc).
_____ Hair pulled.
_____ Pulling (of ears, tongue, limbs).
_____ Pressure on eyes.
_____ Physical exhaustion (forced: prolonged standing, abnormal positions, or excessive exercise).
_____ Climate stress (excessive cold or hot temperatures in cells or detention rooms).
_____ Asphyxiation (obstruction to normal breathing).
_____ If your answer was not zero, please write the number of times it happened:
  _____ Via water.
  _____ Via contaminated water (excrement, vomit, blood, food remnants, etc).
  _____ Via gags, bags or towels.
  _____ Strangulation of the neck.
_____ Bright lights (forced to stare at).
_____ Deprivation of sleep (less than 4 hours per day).
_____ Deprivation of water (none for 2 days).
_____ Deprivation of food (none, very little, or not edible, per day).
_____ Sexual violation.
If your answer was not zero, please write the number of times it included:
  _____ Rape (including via fingers).
  _____ Insertion of instruments.

(Please continue on the next page)

For each item below, please write the number of times it happened to you, or just write "Yes" if you cannot remember the number of times, or write a zero if it did not happen to you.

Mental methods:

_____ Verbal threats of death.
_____ Verbal threats of sexual assault.
_____ Verbal threats of more torture.
_____ Verbal threats of harm to family or friends.
_____ Other verbal threats
(_____).
_____ Sham executions of self.
_____ Sham executions of others.
_____ Hearing screams of others being tortured.
_____ Forced to watch torture of family or friends.
_____ Forced to watch torture of strangers.
_____ Family or friends forced to watch you being tortured.
_____ Others forced to watch you being tortured.
_____ Forced to take drugs (pills, liquids, injections, fumes).
_____ Forced exposure to animals or insects (while locked in a room, tied up or chained).
_____ Constant interrogations (more than 8 hours during a 24-hour period).
_____ Changing attitude of interrogator (becoming "friendly," promising food, special favors, or an end to torture).
_____ Isolation (solitary confinement).
_____ Blindfolding.
_____ Prolonged loud noises.
_____ Verbal abuse (repeated harsh insults).
_____ Forced eating of excrement.
_____ Nakedness (during detention or interrogation).

Other methods:

_____ _____
_____ _____
_____ _____
_____ _____

- - - - - - - - - - - - - - - - - -

Finally, please answer these last few questions:

For how many days (total of all detentions) were you held? _____

On how many of those days did the items checked above occur? _____

In what month and year did this maltreatment end? ___ /19___

During this time were you forced to say or do something that you did not wish to, or that you did not believe, such as: sign a statement, denounce someone, identify a person or group, or promise to do or avoid doing or saying something in the future? ___Yes. ___No.

Before you were detained, how politically active were you?

___Little. ___Some. ___Very.

APPENDIX D

Determination of Torture

Appendix D

The definition of torture includes the application of pain that is both severe and systematic. Being severe, the infliction of pain cannot be "merely" the rough and painful handling that a prisoner, political or otherwise, might receive at the hands of uncaring or corrupt jailers, but must go beyond that level to the conscious attempt to inflict maximal torment. Being systematic, such infliction must be more than a one-time experience, but rather, a part of a series of intended traumas. Some examples from among the participants of this study follow.

A Salvadoran subject noted, on the questionnaire, that he had once been detained and abused. He reported having been picked up at a bus stop by the police, as it was evening and they were suspicious of young males out during the dark hours. While being driven around in the police jeep for half an hour he was beaten. He was then released, without being arrested nor brought to the police station or jail. While he clearly was the victim of a serious assault and battery, the experience, taken as a whole, was neither systematic nor sustained, and was not classified as torture.

Another Salvadoran reported being detained and held for three days. During these three days he was subject to several instances of death threats and verbal abuse. While this meets the criteria for a sustained pattern of abuse, and notwithstanding the degree of fear that such an

experience could be expected to generate, this subject was classified in the "specific danger" category rather than as having been subjected to torture, because of the absence of any physical methods having been applied, the limited number of psychological methods, and his own self-report ("arrest without torture" and "death threats").

A more difficult judgment involved a Salvadoran who had been detained for four days, during which time he was subject to verbal threats, could hear the screams of others being tortured, was forced to sign a statement or make a promise that he did not want to, and reported having had family or friends forced to watch his being tortured. Yet he did not list what those tortures may have been, and he chose "death threats" rather than "detention with torture" as his reason for leaving. In the case of both death threats and torture, it may well be that the most immediate reason for leaving is the threat of death rather than the experience of, or threat of more, torture. This situation made for the most difficult judgment; the deciding factors were his indirect acknowledgment of having been tortured by noting that others were forced to watch it, and the intense psychological situation of being exposed to the screams of others while (presumably) waiting his turn. (This last experience alone is a tremendous and terrible torture; a Chilean subject told me how, at the prison where he had been taken, the guards came for the prisoners in order by cell, each prisoner thus knowing when his own turn was approaching.

Each could see the prisoner ahead of him being brought back to his cell, shattered, bleeding and groaning. By the time the guards would come for the next prisoner, that prisoner would be completely immobilized with fear, shaking and unable to support himself.)

Of the 109 subjects in this study, there were five cases involving judgments of some difficulty; two of these five were defined as having been exposed to torture. The training of a second judge would have been useful in establishing the validity of the judgments that were made in these cases, or in leading to one or more changes in category among these five cases. Since all of these cases came from the relatively well-populated more recent time categories, it seems unlikely that one or more shifts, should they have been found appropriate, would have had any overall statistical impact.

APPENDIX E

ANOVA Statistical Test Results

Appendix E

Below are the statistical results for the several ANOVA analyses reported in the study.

Interaction, Torture and Recency.

SS	dF	MS	F	p
2492.381	4	623.095	2.139	0.0815
29136.063	100	291.361		

Main effect of Torture.

SS	dF	MS	F	p
5878.686	2	2939.343	10.088	0.0001
29136.063	100	291.361		

Main effect of Recency.

SS	dF	MS	F	p
4747.456	2	2323.728	7.975	0.0006
29136.063	100	291.361		

Contrast, Recency, first levels against second level, for all levels of Torture exposure.

SS	dF	MS	F	p
422.614	1	422.614	1.450	0.2313
29136.063	100	291.361		

Contrast, Torture, all levels, for the first two levels of Recency.

SS	dF	MS	F	p
5995.056	2	2997.528	10.288	< 0.0001
29136.063	100	291.361		

Contrast, Torture, all levels, for the third level (only) of Recency.

SS	dF	MS	F	p
1754.558	2	877.279	3.011	0.0537
29136.063	100	291.361		

References

Agger, I. (1989). Sexual torture and political prisoners: An Overview. Journal of Traumatic Stress, 2, 305-318.

Allodi, F. (1980). The Psychiatric effects of political persecution and torture in children and families of victims. Canada's Mental Health, 28, 8-10.

Allodi, F., & G. Cowgill. (1982). Ethical and psychiatric aspects of torture: A Canadian study. Canadian Journal of Psychiatry, 27, 98-102.

American Psychiatric Association. (1952). Diagnostic and statistical manual of mental disorders. Washington, DC: Author.

American Psychiatric Association. (1968). Diagnostic and statistical manual of mental disorders (2nd ed.). Washington, DC: Author.

American Psychiatric Association. (1980). Diagnostic and statistical manual of mental disorders (3rd ed.). Washington, DC: Author.

American Psychiatric Association. (1987). Diagnostic and statistical manual of mental disorders (3rd ed., revised). Washington, DC: Author.

American Psychological Association. (1987). Psychological Abstracts. Washington, DC: Author.

American Psychological Association. (1988). Psychological Abstracts. Washington, DC: Author.

American Psychological Association. (1989). Psychological Abstracts. Washington, DC: Author.

Amnesty International. (1984). Torture in the eighties. London: Author.

Amnesty International. (1990). Amnesty International report 1990. London: Author.

Beebe, G. W. (1975). Follow-up studies of World War II and Korean War prisoners. II. Morbidity, disability, and maladjustments. American Journal of Epidemiology, 101, 400-422.

Blanchard, E. B., Gerardi, F. J., Kolb, L. C., & Barlow, D. H. (1986). The Utility of the Anxiety Interview Schedule (AIS) in the diagnosis of post-traumatic stress disorder (PTSD) in Vietnam veterans. Behavior Research and Therapy, 24, 577-580.

Bouhoutsos, J. C. (1990). Treating victims of torture: Psychology's challenge. In P. Suedfeld (Ed.), Psychology and torture (pp. 129-141). New York: Hemisphere Publishing.

Breslau, N., & Davis, G. (1987). Posttraumatic stress disorder: The stressor criterion. The Journal of Nervous and Mental Disease, 175, 255-264.

Brett, E. A., Spitzer, R. L., & Williams, J. B. W. (1988). DSM-III criteria for posttraumatic stress disorder. American Journal of Psychiatry, 145, 1232-1326.

Bustamante, F. (1990). The Military in Latin America: Is the retreat for good? Bulletin of Peace Proposals, 21, 371-384.

Bustos, E. (1990). Dealing with the unbearable: Reactions of therapists and therapeutic institutions to survivors of torture. In P. Suedfeld (Ed.), Psychology and torture (pp. 143-163). New York: Hemisphere Publishing.

Cannon, D. S., Bell, W. E., Andrews, R. H., & Finkelstein, A. S. (1987). Correspondence between MMPI PTSD measures and clinical diagnosis. Journal of Personality Assessment, 51, 517-521.

Cervantes, R. C., Salgado de Snyder, V. N., & Padilla, A. M. (1988). Post-traumatic stress disorder among immigrants from Central America and Mexico. Spanish Speaking Mental Health Research Center occasional paper number 24. Los Angeles: University of California at Los Angeles.

Dely, R. J. (1983). Samuel Pepys and post-traumatic stress disorder. British Journal of Psychiatry, 143, 64-68.

Domovitch, E., Berger, P. B., Wawer, M. J., Etlin, D. D., & Marshall, J. C. (1984). Human torture: Description and sequelae of 104 cases. Canadian Family Physician, 30, 827-830.

Eitinger, L. (1964). Concentration camp survivors in Norway and Israel. Oslo: Universitetsforlaget.

Eitinger, L., & Askevold, F. (1968). Arrest and imprisonment. In A. Strom (Ed.), Norwegian concentration camp survivors (pp. 45-84). New York: Humanities Press.

Fischman, Y., & Ross, J. (1990). Group treatment of exiled survivors of torture. American Journal of Orthopsychiatry, 60, 135-142.

Foster, D. (1987). Detention & Torture in South Africa. Cape Town, South Africa: David Philip.

Foy, D. W., & Card, J. J. (1987). Combat-related post-traumatic stress disorder etiology: Replicated findings in a national sample of Vietnam-era men. Journal of Clinical Psychology, 43, 28-31.

Foy, D. W., Carroll, E. M., & Donahoe, C. P., Jr. (1987). Etiological factors in the development of PTSD in clinical samples of Vietnam combat veterans. Journal of Clinical Psychology, 43, 17-27.

Frelick, B. (1991). Running the gauntlet: The Central American journey through Mexico. Washington, DC: U.S. Committee for Refugees.

Freud, S. (1959). The Aetiology of Hysteria. In J. Riviere (Ed.), Sigmund Freud, Collected Papers (Vol. 1, pp. 183-219). New York: Basic Books. (Original work published 1896)

Gibson, J. T. (1990). Factors contributing to the creation of a torturer. In P. Suedfeld (Ed.), Psychology and torture (pp. 77-88). New York: Hemisphere Publishing.

Goldfeld, A. E., Mollica, R. F., Pesavento, B. H., & Faraone, S. V. (1988). The Physical and psychological sequela of torture. Journal of the American Medical Association, 259, 2725-2729.

Goldstein, G., van Kamman, W., Shelly C., Miller, D. J., & van Kamman, D. P. (1987). Survivors of imprisonment in the Pacific theater during World War II. American Journal of Psychiatry, 144, 1210-1213.

Goleman, D. (1989, April 25). Grim specialty emerges as therapists treat victims of torture. The New York Times, pp. C1, C12.

Goodwin-Gill, G. S. (1983). The Refugee in international law. Oxford: Clarendon.

Green, B. L., Grace, M. C., & Gleser, G. C. (1985). Identifying survivors at risk: Long-term impairment following the Beverly Hills Supper Club fire. Journal of Consulting and Clinical Psychology, 53, 627-678.

Green, B. L., Lindy, J, D., & Grace, M. C. (1985). Posttraumatic stress disorder. The Journal of Nervous and Mental Disease, 173, 406-411.

Hays, W. L. (1973). Statistics for the social sciences. New York: Holt, Rinehart and Winston.

Helzer, J. E. (1981). Methodological issues in the interpretations of the consequences of extreme situations. In B. S. Dohrenwend & B. P. Dohrenwend (Eds.), Stressful life events and their contexts (pp. 108-129). New York: Prodist.

Horowitz, M. M. (1976). Stress response syndromes. New York: Jason Aronson.

Horowitz, M. J. (1986). Stress response syndromes (2nd ed.). Northvale, NJ: Jason Aronson.

Horowitz, M., Wilner, N., & Alvarez, W. (1979). Impact of events scale: A measure of subjective stress. Psychosomatic Medicine, 41, 209-218.

Hyer, L., Fallon, J. H. Jr., Harrison W. R., & Boudewyns, P. A. (1987). MMPI overreporting by Vietnam combat veterans. Journal of Clinical Psychology, 43, 79-83.

Kardiner, A., & Spiegel, H. (1947). War stress and neurotic illness (2nd ed.). New York: Paul B. Hoeber.

Keane, T. M., Wolfe, J., & Taylor, K. L. (1987). Post-traumatic stress disorder: Evidence for diagnostic validity and methods of psychological assessment. Journal of Clinical Psychology, 43, 32-43.

Kenzie, J. D., Fredrickson, R. H., Ben, R., Fleck, J., & Karls, W. (1984). Posttraumatic stress disorder among survivors of Cambodian concentration camps. American Journal of Psychiatry, 141, 645-650.

Kastrup, M., Genefke, I. K., Lunde, I. & Ortmann, J. (1988). Coping with the exposure to torture. Contemporary Family Therapy, 10, 280-287.

Kilpatrick, D., Saunders, B., Amick-McMullan, A., Best, C., Veronen, L., & Resnick, H. (1989). Victim and crime factors associated with the development of crime-related post-traumatic stress disorder. Behavior Therapy, 20, 199-214.

Koloff, C. A., & Doan, R. N. (1985). Victims of torture: Two testimonies. In E. Stover & E. O. Nightingale (Eds.), The Breaking of bodies and minds: Torture, psychiatric abuse, and the health professions (pp. 45-57). New York: W. H. Freeman.

Kramer, H., & Sprenger, J. (1971). The Malleus maleficarum (M. Summers, Trans.). New York: Dover Publications (Original work published 1484)

Laborde, J. M. (1989). Torture: A Nursing concern. IMAGE: Journal of Nursing Scholarship, 21, 31-33.

Langbein, J. H. (1976). Torture and the law of proof. Chicago: The University of Chicago Press.

Leslie, L. A., & Leitch, M. L. (1989). A Demographic profile of recent Central American immigrants: Clinical and service implications. Hispanic Journal of Behavioral Sciences, 11, 315-329.

Lin, K. (1986). Psychopathology and social disruption in refugees. In C. L. Williams & J. Westermeyer (Eds.), Refugee mental health in resettlement countries (pp. 61-73).

Madakasira, S., & O'Brien, K. F. (1987). Acute posttraumatic stress disorder in victims of a natural disaster. Journal of Nervous and Mental Disease, 175, 286-290.

Marcus, P., & Rosenberg, A. (Eds.). (1989). Healing their wounds: Psychotherapy with Holocaust survivors and their families. New York: Praeger.

Melander, G. (1988). The Concept of the term 'refugee'. In A. Bramwell (Ed.), Refugees in the age of total war (pp. 7-14). London: Unwin Hyman.

Mollica, R. F., Wyshak, G., & Lavelle, J. (1987). The Psychosocial impact of war trauma and torture on southeast Asian refugees. The American Journal of Psychiatry, 144, 1567-1572.

Ortmann, J., Genefke, I. K., Jakobsen, L., & Lunde, I. (1987). Rehabilitation of torture victims: An Interdisciplinary treatment model. The American Journal of Social Psychiatry, 8, 161-167.

Peters, E. (1985). Torture. New York: Basil Blackwell.

Rasmussen, O. V. (1990). Medical aspects of torture. Danish Medical Bulletin, 37 (Suppl. 1), 1-88.

Richmond, A. H. (1988). Sociological theories of international migration: The Case of refugees. Current Sociology, 36, 7-25.

Rozee, P. D., & Van Boemel, G. (1989). The Psychological effects of war trauma and abuse on older Cambodian refugee women. Women & Therapy, 8, 23-50.

Selye, H. (1983). The Stress concept: Past, present, and future. In C. L. Cooper (Ed.), Stress research: Issues for the Eighties (pp. 1-20). New York: John Wiley & Sons.

Stanley, W. D. (1987). Economic migrants or refugees from violence? A Time-series analysis of Salvadoran migration to the United States. Latin American Research Review, 22, 132-154.

Staub, E. (1990). The Psychology and culture of torture and torturers. In P. Suedfeld (Ed.), Psychology and torture (pp. 49-76). New York: Hemisphere Publishing.

Stein, B. N. (1986). The Experience of being a refugee: Insights from the research literature. In C. L. Willams & J. Westermeyer (Eds.), Refugee mental health in resettlement countries (pp. 5-23). Washington, DC: Hemisphere Publishing.

Stover, E., & Nightingale, E. O. (1985a). Introduction. In E. Stover & E. O. Nightingale (Eds.), The Breaking of bodies and minds: Torture, psychiatric abuse, and the health professions (pp. 1-26). New York: W. H. Freeman.

Stover, E., & Nightingale, E. O. (1985b). Appendix A: Codes of ethics and declarations on abuse. In E. Stover & E. O. Nightingale (Eds.), The Breaking of bodies and minds: Torture, psychiatric abuse, and the health professions (pp. 253-279). New York: W. H. Freeman.

Stretch, R. H. (1985). Posttraumatic stress disorder among U.S. Army Reserve Vietnam and Vietnam-era veterans. Journal of Consulting and Clinical Psychology, 53, 935-936.

Strom, A. & Eitinger, L. (1968). Arrest and imprisonment. In A. Strom (Ed.), Norwegian concentration camp survivors (pp. 18-44). New York: Humanities Press.

Stubbe, R. W. (1985). A Suggested reading list on Vietnam veterans and post-traumatic stress disorder. In W. Kelly (Ed.), Post-traumatic stress disorder and the war veteran patient (pp. 293-314). New York: Brunner/Maxel.

Suedfeld, P. (1990). Torture: A Brief Overview. In P. Suedfeld (Ed.), Psychology and torture (pp. 1-11). New York: Hemisphere Publishing.

Tennen, H., & Herzberger, S. (1985). Impact of event scale. In D. Keyser & R. Sweetland (Eds.), Test critiques: Vol. 3 (pp. 358-366). Kansas City, MO: Test Corporation of America.

van Kampen, M., Watson, C. G., Tilleskjor, C., Kucala, T., & Vassar, P. (1986). The definition of posttraumatic stress disorder in alcoholic Vietnam veterans: Are the DSM-III criteria necessary and sufficient? Journal of Nervous and Mental Disease, 174, 137-144.

Vanderploeg, R. D., Sison G. F. Jr., & Hickling, E. J. (1987). A reevaluation of the use of the MMPI in the assessment of combat-related posttraumatic stress disorder. Journal of Personality Assessment, 51, 140-150.

Vernez, G. (1991). Current global refugee situation and international public policy. American Psychologist, 46, 627-631.

Weschler, L. (1990). A Miracle, a universe: Settling accounts with torturers. New York: Pantheon.

Wilson, J., & Krauss, G. Predicting post-traumatic stress disorders among Vietnam veterans. (1985). In Kelly, W. (Ed.), Post-traumatic stress disorder and the war veteran patient (pp. 102-147). New York: Brunner/Maxel.

Woodward, J. A., Bonnett, D. G., & Brecht, M. (1990). Introduction to linear models and experimental design. San Diego: Harcourt Brace Jovanovich.

Zilberg, N., Weiss, D., & Horowitz, M. (1982). Impact of event scale: A Cross-validation study and some empirical evidence supporting a conceptual model of stress response syndromes. Journal of Consulting and Clinical Psychology, 50, 407-414.

Zolberg, A. R., Suhrke, A., & Aguayo, S. (1989). Escape from violence: Conflict and the refugee crisis in the developing world. New York: Oxford University Press.