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Dissociation and posttraumatic stress disorder in Khmer refugees resettled in the United States

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DISSOCIATION AND POSTTRAUMATIC STRESS DISORDER IN KHMER REFUGEES RESETTLED IN THE UNITED STATES

by

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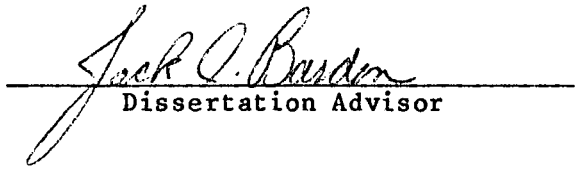

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APPROVAL PAGE

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The purpose of this study was to examine the amount of trauma endured in a nonpsychiatric population of Khmer refugees and DSM-III diagnoses through current symptoms of dissociative states, posttraumatic stress disorder (PTSD), depression and anxiety. Subsequent relationships between individual trauma items and symptomatology were examined as were relationships between all dependent variables. A total weighted trauma score and a total additive trauma score were also examined.

The Dissociative Experiences Scale (DES), the Hopkins Symptom Checklist-25 (Cambodian version) (HSCL-25), and a PTSD symptom checklist were used as dependent measures and were administered to 50 Khmer refugees living in Greensboro, North Carolina. The independent variable was amount of trauma measured by a trauma questionnaire.

Statistical analyses were conducted to determine if relationships existed between the independent variable of trauma and the dependent variables. The Pearson product moment correlation procedure was used to provide coefficients to examine the various relationships.

Results of these analyses indicated statistically significant relationships existed between amount of trauma and scores on the DES, PTSD symptom checklist, and HSCL-25 measuring depression, anxiety, and a composite of both. Subsequent findings indicated clusters of individual trauma items showed statistical significance to dependent variables. Correlations between all dependent variables indicated statistical significance. Analyses for a total trauma and a weighted trauma with

dependent variables were statistically significant, yielding similar correlations.

Results of this study support the severity of psychic trauma and the development of dissociative disorders in the Khmer. Results indicated the existence of PTSD, depression, anxiety, and a composite of anxiety and depression, and the existence of PTSD in conjunction with other DSM-III-R disorders in a nonpsychiatric Southeast Asian refugee population. Two new instruments with proven reliability and validity to assess PTSD and dissociative disorders are now available to counselors. However, further research is needed to validate the existence of psychological disorders in nonpsychiatric Southeast Asian refugee populations.

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CHAPTER I

INTRODUCTION

While there have been refugees in our world throughout recorded history, today the increasing number of refugees demands special attention. Smyser (1985) indicated that the second half of the twentieth century has witnessed an explosion in the number of refugees. Since 1945 there have been an estimated 60 million refugees worldwide, more than twice the number of the preceding fifty years.

The refugee crisis in Indochina caused a flood of Southeast Asian refugees to enter the United States. Indochinese people fled their countries in a mass exodus as a result of the war between North Vietnam and South Vietnam. The exodus began in 1975 following the surrender of the government of South Vietnam to the Communist forces of the North, the fall of the Cambodian capital of Phnom Penh, and the end of monarchy in Laos (Krupinski & Burrows, 1986).

With the collapse of American intervention in Vietnam and Laos, the United States also withdrew support from Cambodia in April of 1975. It was at this time that the French-educated Communist Pol Pot recruited Cambodians to become Communist guerrillas in an effort to eradicate the intelligentsia and begin a new classless society. The Cambodian holocaust engineered by Pol Pot and his "Khmer Rouge" followers evacuated Cambodia's cities and dispersed the Cambodians to slave labor farms or "re-education" centers. During this reign of terror, family

life was banned, Buddhist temples were destroyed, and human interaction punished. The "Angka Loeu," as the Khmer Rouge called their regime, demanded all sense of belonging and affiliation to the embodiment of the Communist state (Hamilton & Hadjipani, 1985). Between 1975 and 1979 three to three and one half million Cambodians were executed or starved to death under the brutality of Pol Pot's experiment in textbook communism (Sheehy, 1982).

The Cambodian refugees, having suffered through the brutality of the Pol Pot regime, experienced multiple traumas, including severe torture. Little is known, however, of the psychological impact of trauma on refugees (Mollica & Lavelle, 1988). In fact, clinical descriptions of trauma-related psychiatric disorders were nonexistent until Kinzie, Fredrickson, Ben, Fleck, and Karls (1984) described the experiences of 13 Cambodian concentration camp survivors. In the most recent study of the impact of war trauma and torture on Southeast Asian refugees, Mollica, Wyshak, and Lavelle (1987) looked at the traumatic events experienced by 52 Indochinese psychiatric patients. They found that the refugees' traumatic experiences fell into four general categories: deprivation (of food and shelter), physical injury and torture, incarceration or re-education camps, and witnessing killing and torture. Their research emphasized the importance of clinicians working with the Indochinese refugees to obtain a detailed trauma history as well as to be able to recognize and treat trauma-related symptoms.

Although Mollica et al. (1987) indicated that no epidemiologic studies exist on the prevalence of psychiatric disorders in any Southeast Asian refugee communities, a number of studies have reported

on the psychological adjustment of Southeast Asian refugees in America. Clinicians working with these refugee populations have determined that their ex riences have caused them psychological disturbance. Krumperman (1981) reported that many refugees who experienced torture, rape, and violence were subsequently prone to psychological problems such as feelings of guilt, hostility, despondency, and inadequacy.

Duncan and Kang (1984) reported that large numbers of Khmer were separated from their family members under circumstances that prevented them from resolving their feelings of loss and grief. These separations were often brutal and violent in nature. For example, they found it was a common experience for many Khmer children to have seen family members or friends cruelly punished or killed for talking to or even looking at one another in the Pol Pot re-education camps. Their study emphasized the enormity of the refugees' task as they try to resolve tremendous personal grief and loss.

Robinson (1980) reported that not only have refugees left their homeland, been separated from family and friends, and waited for interminable lengths of time in refugee camps, but also they have faced additional problems when they resettled in a new country - problems such as cultural differences, language difficulty, inadequate housing, and jobs of much lower status than in their own culture.

Tyhurst (1951) was the first to describe two distinct periods of behavior observed in "displaced persons" seen at the Psychiatric Institute in Montreal. He reported an initial period lasting for several months during which the refugee feels euphoric. The second period he described as the "psychological arrival" during when the

individual increasingly recognizes differences in customs, idealizes the past, and focuses on losses. Robinson (1980) similarly indicated that after the process of resettlement, Indochinese refugees reflect upon their whole ordeal and at such a time the full weight of their sorrow and loss becomes apparent. Cohon (1977) discovered that depression existed in 92% of 54 Indochinese refugee psychiatric patients living in the San Francisco area for over two and one half years.

It is evident refugees have many issues to resolve. The Southeast Asian refugees resettled in America have experienced multiple traumas and tortures. The Cambodian or Khmer refugees in particular have experienced more torture and trauma than other Indochinese groups (Mollica et al., 1987). As Mollica and Lavelle (1988) emphasized, the available psychosocial adaptation studies and clinical investigations of refugees had not looked at psychiatric disorders (such as posttraumatic stress disorder, PTSD) and related traumatic events until Kinzie et al. (1984) reported on Cambodian concentration camp surv vors. A recent study by Mollica and Lavelle (1987) showed that Indochinese refugee psychiatric patients are survivors of multiple traumas and tortures and many suffer from both depression and posttraumatic stress disorder. They indicate the importance of PTSD as a secondary diagnosis and that PTSD was almost always associated with another disorder.

Putnam (1985) suggested that a link exists between the severity of psychic trauma and the subsequent development of dissociative disorders. His research examined other populations that had experienced varying forms of extreme trauma. However, as Spiegel (1986) indicated, there is

only limited empirical validation of the effects of trauma and the phenomenon of dissociation. Additionally, no research has been conducted on the development of dissociative disorders in Southeast Asian refugees. In particular, the Khmer refugee has recently been identified as the most severely traumatized Southeast Asian refugee ethnic group (Mollica et al., 1987).

Mollica and Lavelle (1988) have called attention to the fact that no research exists on the prevalence of refugee trauma and trauma-related psychiatric disorders. Currently, moreover, there is no published research on the incidence of dissociation in any Southeast Asian refugee population. Specifically, the relationship between dissociation and trauma has never been examined in this unique population. The unavailability of reliable and valid means of measuring dissociative states has recently been changed through the development of the Dissociative Experiences Scale (DES) (Bernstein & Putnam, 1986).

Needed is research that examines the amount of trauma and the relationships between this trauma and the ex ence and degree of various psychological disorders. In fact, no known research to date has explored the relationships among amount of trauma, dissociation, PTSD, anxiety, and depression. This study proposes to examine these relationships and provide empirical validation by documenting the amount of trauma endured in relation to the incidence of dissociation, PTSD, anxiety, and depression in Khmer refugees.

Posttraumatic Stress Disorder, Dissociation, and the Southeast Asian Refugee

Posttraumatic stress disorder (PTSD) is a subclass within the anxiety disorders category in the third edition (revised) of the

Diagnostic and Statistical Manual (DSM-III-R) (American Psychiatric Association, 1987). This disorder is manifested in many individuals who have lived through a particularly stressful and traumatic event. The disorder seems to affect individuals more acutely when the traumatic event is a deliberate man-made disaster (Laufer, Frey-Wouters, Donnellan, & Yager 1981; Laufer, Frey-Wouters & Gallops, 1984; Silver & Iacono, 1984.) Specifically Laufer, Frey-Wouters, and Gallops (1985) found that combat exposure and witnessing abusive violence contributed to higher rates on an intrusive imagery scale. Laufer, Brett, and Gallops (1984) discovered that both the witnessing of abusive violence and exposure to combat related significantly to higher scores on their Reexperiencing and Denial Disorder Scales.

August and Gianola (1987) compared the symptomatology of Vietnam veterans suffering from psychiatric disorders related to war trauma and Southeast Asian refugees with mental health disorders. They found striking similarities to exist in these two seemingly disparate populations. Their research also indicated that although the Southeast Asian refugee population is significant in the United States, there are only two published articles connecting PTSD with symptoms in Southeast Asian refugees (Kinzie et al.; 1984, Boehnlein, Kinzie, Rath, & Fleck, 1985). They further indicated that no large-scale epidemiological study exists determining whether PTSD or other trauma-induced disorder is prevalent in this population.

Kinzie et al. (1984) were the first to examine clinical descriptions of trauma-related psychiatric disorders and PTSD in survivors of Cambodian concentration camps who were patients at the Indochinese

Psychiatry Clinic. Their patients were found to meet the DSM-III diagnosis for PTSD in addition to a diagnosis of depression. Mollica, Wyshak, and Lavelle (1987) found in their six-month treatment outcome study of 52 Indochinese patients that 26 met the DSM-III criteria for PTSD, while 37 met the DSM-III diagnosis for major affective disorder. These studies indicate Indochinese refugee patients suffer both depression and trauma-related symptoms.

PTSD includes many of the salient features associated with dissociative states. Kluft, Steinberg & Spitzer (1988), reviewers for the DSM-III and DSM-III-R, indicated that posttraumatic stress disorder was proposed for reclassification from the Anxiety Disorders to the Dissociative Disorders section in the DSM-III-R. They reported many of the symptoms operative in posttraumatic stress disorder are dissociative in nature. In particular, the essential feature of Dissociative Disorders, "a disturbance or alteration in the normally integrative functions of identity, memory, or consciousness" (American Psychiatric Association, 1987, p. 269), operates in instances where the mind is impaired in its capacity to contain memories (Kluft, Steinberg & Spitzer, 1988). Similarly, Horowitz (1986) described the symptoms of numbing and intrusive phenomena found in PTSD as being consistent with the dissociative process.

Putnam (1985a) reported that in many traumatic situations a connection between traumatic events and the development of dissociative symptoms has been documented. In addition, the literature has increasingly focused on the contribution of dissociation to PTSD (Blank, 1985; Bliss, 1983; Gelinas, 1984; Kolb, 1985). Brende

(1985) noted that many individuals suffering with PTSD also suffered from split identity processes, inherent in forms of dissociative disorders. Similarly, Bernstein and Putnam (1986) found subjects with PTSD scored in the high range on the Dissociative Experiences Scale, indicating the existence of dissociative disorders.

In summary, it is evident the Cambodian refugees resettled in the United States have endured extreme and multiple traumatic experiences. Posttraumatic stress disorder among these Indochinese refugees has been quantified in limited studies of Indochinese psychiatric populations (Kinzie et al. 1984; Mollica et al., 1987). It has been associated in both instances with depression and trauma-related symptoms.

What is lacking is research in nonpsychiatric Southeast Asian refugee populations to examine the relationships between the amount of trauma and other psychological disorders such as dissociation, PTSD, anxiety, and depression. Such research may further substantiate the role extreme trauma plays in the development of psychological disorders.

Statement of the Problem

The problems addressed in this study is to determine whether relationships exist between the amount of trauma endured by the Khmer during the Pol Pot regime and (a) current dissociative states as determined by scores obtained on the Dissociative Experiences Scale (DES) (Bernstein & Putnam, 1986), (b) PTSD as determined by the PTSD symptom checklist, and (c) anxiety and depression as determined by scores obtained on the Hopkins Symptom Checklist-25 (Cambodian version) (Mollica, 1986).

Purpose of the Study

This research was designed to examine the relationships between the amount of trauma endured in a nonpsychiatric population of Khmer refugees and DSM-III-R diagnoses through currrent symptoms of dissociative states, PTSD, depression, and anxiety. Findings of this study are expected to empirically validate limited previous studies regarding the existence of psychological disorders in Southeast Asian refugee populations. In addition, this research explores dissociative phenomena in a Southeast Asian refugee population, heretofore not examined in the literature. Specifically, the research will determine the amount of refugee trauma and the relationship between this trauma and the trauma-related psychological disorders of dissociative states, PTSD, depression, and anxiety.

Research Questions

To explore the relationship between the amount of trauma endured and the incidence of psychological disorders, five research questions were developed: (1) Does a statistically significant positive correlation exist between the amount of trauma experienced by Khmer refugees and the development of dissociative disorders? The limited studies on dissociation and trauma have indicated the more extreme the psychic trauma, the greater the incidence of dissociative phenomena occuring (Putnam, 1985).

(2) Does a statistically significant positive correlation exist between the amount of trauma experienced by Khmer refugees and post-traumatic stress disorder symptomatology? Again, the literature reflects that significant amounts of psychic trauma appear to result in

the development of PTSD symptomatology (Loufer, Frey-Wouters & Gallops, 1985; Vander Kolk, 1984). In the two studies on PTSD in the Southeast Asian refugee population, PTSD was prevalent (Kinzie et al., 1984; Mollica et al., 1987).

(3) Does a statistically significant positive correlation exist between the amount of trauma experienced by Khmer refugees and a diagnosis of depression? Mollica et al. (1987) indicated depressive symptomatology in the majority of their subjects with PTSD who had experienced severe trauma.

(4) Does a statistically significant positive correlation exist between the amount of trauma experienced by the Khmer refugee and a diagnosis of anxiety?

(5) Does a statistically significant positive correlation exist between the amount of trauma experienced by the Khmer refugee and a total diagnosis on the HSCL-25 of anxiety and depression? The available literature on trauma and HSCL-25 scores (Mollica et al., 1987) suggests that a positive correlation should be expected.

In addition, the data were examined to discern what other factors and hypotheses may be generated by this study. The heuristic value will be in questioning what the data seem to indicate about the need for further research in the areas of trauma, dissociation, PTSD, anxiety, and especially depression in this heretofore unexamined Southeast Asian nonpsychiatric refugee population.

Definition of Terms

Specific terms used in this research pertaining to the culture studied and methods of measurement used must be defined operationally.

Khmer is used to designate the ethnically dominant inhabitants (and their language) of ancient and modern Cambodia (Ebihara, 1985). In this study, Khmer are those Khmer resettled and now living in Greensboro, North Carolina.

Dissociation is defined as a psychological phenomenon that has as its essential feature "a disturbance or alteration in the normally integrative functions of identity, memory, or consciousness. The disturbance or alteration may be sudden or gradual, and transient or chronic" (American Psychiatric Association, 1987, p. 269.) Different forms of dissociative disorders lie on a continuum from the minor forms of dissociation of everyday life to major forms of psychopathology such as multiple personality disorders (Bernstein & Putnam, 1986). Dissociation will be measured by scores on the Dissociative Experiences Scale (DES) (Bernstein & Putnam, 1986) which is used to distinguish between Khmer refugees with a dissociative disorder and those without.

Posttraumatic stress disorder (PTSD) is defined as a disorder that has as its essential feature the development of characteristic symptoms following a stressor that is outside the range of usual human experience (American Psychiatric Association, 1987). Symptoms characteristic of the disorder involve re-experiencing the traumatic event, avoidance of stimuli associated with the event or numbing of general responsiveness, and increased arousal. PTSD will be measured using a self-report PTSD symptom checklist. This checklist, developed specifically for this study, reflects the diagnostic criteria for posttraumatic stress disorder, number 309.89, in the DSM-III-R.

Trauma is defined as the experiences of Cambodian refugees from 1975 through 1979 in Cambodia during the reign of terror under Pol Pot's dictatorship. Trauma will be measured using a 21-item checklist obtained from Dr. Kenneth Meinhardt used in the Asian Health Assessment Project (1986) in California. It is measured by a "yes" or "no" checklist regarding the severity of traumatic experiences endured by the Khmer refugee during the Pol Pot era.

Anxiety is defined as significant emotional distress experienced through symptoms of increased arousal and disquietude. Anxiety will be measured using the Hopkins Symptom Checklist-25 (HSCL-25), Cambodian version (Mollica, 1986), which is used to identify Khmer refugees with symptoms universally associated with anxiety (Mollica, Wyshak, de Marneffe, Khuon, & Lavelle, 1987).

Depression is defined as significant emotional distress experienced through symptoms of chronic mood disturbances with a diminished interest in life. Depression will be measured using the Hopkins Symptom Checklist-25 (HSCL-25), Cambodian version (Mollica, 1986), which is used to identify Khmer refugees with symptoms universally associated with depression (Mollica et al., 1987).

Organization of Chapters

In this study, Chapter II will present literature related to the trauma the Khmer refugee has endured and the effects of that trauma. Dissociation as well as PTSD in populations that have experienced extreme trauma similar to that of the refugee will be addressed. Chapter III presents the methodology used for this study and information on inclusion of the traumatic events chosen for study with this

population. In addition, the description of the population studied, the instruments used, procedures, and methods of analyzing data are detailed. Chapter IV is a report of results of the study. Chapter V presents the discussion, recommendations, and conclusions of the study.

CHAPTER II

REVIEW OF LITERATURE

This chapter details the research on Southeast Asian refugees (with emphasis on the Khmer), and the traumas they have suffered. A section on dissociation follows. Also included is a review of the research on posttraumatic stress disorder (PTSD) and the manifestation of this disorder in individuals having suffered severe traumas.

Southeast Asian Refugees and their Trauma

Southeast Asia consists of the countries of Vietnam, Cambodia, and Laos. From the beginning of the Vietnam war in the late 1960's to the mid-1970's, there were long and violent civil wars. During these wars there was an unusually high level of brutality and cruelty. Prisoners of war, civilians, and soldiers on both sides received inhumane treatment. Although different factions were fighting, traumatic experiences of Southeast Asians were similar.

Indochinese refugees have experienced multiple losses: their homeland, occupational status, and material possessions. Moreover, they have experienced loss through the deaths of significant others -- their families and friends. Rumbaut (1985) called this a "crisis of loss." Significant family members often were left behind; frequently, it was not known whether they were alive or dead. Brown (1982) noted that essentially all Indochinese refugees have experienced leaving one or more close relatives in Communist Indochina or in a refugee camp. He

identified this as the most difficult problem of the Indochinese refugee. McLeod (1986) reported that the mass killings and forced relocations of the Pol Pot regime in Cambodia caused roughly 80 percent of Khmer refugees to be completely cut off from their families left behind.

The two phases or "waves" of Indochinese refugees resettling in the United States possess different characteristics. The first wave of about 130,000 refugees were primarily Vietnamese and were generally urban and highly educated. The second wave from 1978 to the present is characterized by more rural and less educated refugees whose disparities in economic, cultural, and psychological aspects have caused them difficulties in adapting to the United States (Rumbaut, 1985). Those refugees who were evacuated to the United States in 1975 were not subject to the traumas the second wave of refugees experienced. This second wave experienced a trek of danger, whether by boat or through the jungle on foot. Boman and Edwards (1984) reported many refugees crossed the ocean in overcrowded, unseaworthy vessels without adequate water, food, and fuel. These refugees also were subjected to tropical storms and the terror of Thai pirates. Other refugees not escaping by boat trekked through the jungles of Vietnam fleeing Communists. During these dangerous journeys, refugees experienced near-starvation, disease, death of members of their group, and the constant fear of being captured. Many refugees died or were maimed by land mines. One Khmer refugee woman described how during her escape with four friends, all were killed but herself when she saved her life by crouching behind a bush (Spears, 1986). A Khmer man reported he was only thirteen when he lived in the jungle for a full year "like an animal" eating frogs, plants, and the

leftovers of monkeys (Stuart, 1982). He experienced seeing the bones of hundreds of refugees who had been victims of tigers, snakes, and elephants, or who had died of malaria, starvation or murder by other Cambodians, the Vietnamese, or the Khmer Rouge. During the time alone in the jungle, he also witnessed many being killed by punji stakes and land mines. During his trek, he described, he "lost almost all desire to live, eating only to make myself feel better" (Stuart, 1982, p. 51).

Nguyen (1982) indicated that Indochinese refugees have been traumatized by over 40 years of continuous warfare and political turmoil. He also reported the Southeast Asian refugees lived under horrible conditions in refugee camps and languished for months and often years before acceptance to a country for resettlement.

Mollica et al. (1987) found that, of 52 patients treated at their Indochinese Psychiatry Clinic, all had experienced traumatic events. These events were during the three periods of the war, the escape, and in the refugee camp before coming to America. The authors found that the traumatic experiences of the refugees fell into the four general categories of 1) deprivation, 2) physical injury or torture, 3) incarceration or reeducation camps, and 4) witnessing killing and torture. The specific traumatic events included lack of food or water, ill health, lack of shelter, imprisonment, war injury, torture, sexual abuse, social isolation or solitary confinement, being near death or witnessing death, being lost or kidnapped, witnessing murder or torture, and "other" such as forced separation from children (Mollica et al., p. 1568).

The experience of seeing loved ones tortured and killed is common to the Southeast Asian refugee experience, particularly the Khmer.

Duncan and Kang (1984) reported large segments of the Cambodian population were relocated within the country with children separated from their families. They also indicated that children were put in the position of watching their parents being tortured and killed when the Khmer Rouge executed their enemy. Santoli (1983) described the horror of children being separated from their families and the terror of the killing, blinding, and wounding of women and children. Hawk (1982) estimated 15,000 to 20,000 refugees were exterminated in Cambodia at Tuol Sleng, a former school, where prisoners were isolated and shackled to chains cemented on the floor. He said these prisoners were photographed, interrogated, and tortured into confessing to be agents for the CIA or KGB.

Many Khmer refugees in reeducation or forced labor camps were known to be killed for not working hard enough, often by a hatchet blow to the back of the neck (Time, 1979). Additionally, children considered "undesirable" by the Khmer Rouge were chained together and buried alive in bomb craters with dirt shoveled on them by bulldozers (Time, 1979). In one incident, approximately 300 Khmer were shoved off a high cliff in Cambodia by a bulldozer into a mass grave (Ham El, personal communication, July 1984). Kinzie et al. (1984) found their Cambodian patients avoided discussing the terror endured during the Pol Pot regime. After direct questioning, however, all but one patient described forced rapid migration from their home, forced labor, separation from families, starvation, frequent beatings, common indiscriminate killing, as well as close family members who had been killed or starved to death during their internment.

In a poignant case history, Lavelle and Mollica (in press) described the torture and sexual assault of a Laotian refugee who had been a professor of languages and fluently spoke nine languages. She was found on numerous occasions wandering in a disoriented state in cities in both the United States and Canada. She had experienced five years of captivity wherein she was tortured and raped nightly by 20 to 30 guards. Her experience is not uncommon to some Southeast Asian refugee women.

Var (1980) indicated that under the Communist rule, people were forced to work with barely any food. The Khmer people often ate rats and mice and would take chances in digging up the dead for food. If the Khmer Rouge caught them doing this, they were shot.

A Khmer refugee now living in America witnessed the deaths of all his family members. He relates having seen thousands die, but in particular recalls the horror of seeing babies smashed and the impact of his friends being hit by bullets as they stood next to him (Stuart, 1982). He watched many people die of starvation, and people being executed for no reason. He indicated the Khmer Rouge often made him watch as they cut the livers out of living people. In one re-education camp, he recalled all of the children having been suffocated with plastic bags tied over their heads. Miraculously, he was overlooked.

The Khmer people in particular have witnessed the most horrific of tortures. Var (1980) related having seen four or five people lined up, standing front to back, to have a sharp bamboo stick stuck through them all at the stomach before being pushed into a river. He also indicated that often 10 to 50 people were tied one by one to a tree where they

were slit open from the breastbone down. The Khmer Rouge soldiers would cut out a person's liver and, in front of onlookers, put it into boiling water. After the liver was cooked they would then eat it. One by one these people were forced to watch and wait for their own deaths. He reported these people were killed slowly so those that were allowed to live would "learn a lesson."

Many children were forced to watch as Khmer Rouge soldiers tossed a baby back and forth until he was dropped and killed. One Khmer recalls "you could not speak, not cry out. Just watch. The killing was right in front of me. My eyes saw, but my mind was somewhere else. I didn't feel anything" (Sheehy, 1984, p. 49).

Many Khmer children were forced to kill their peers. In the re-education camps when a child refused to work, for whatever reason, other children were made to use a portable guillotine device on the transgressor (Time, 1982).

In summary, the Southeast Asian refugees resettled in the United States have been witness to and have survived extreme forms of torture and traumatic experiences. The Khmer people, having lived through the genocide of the Pol Pot regime, are the most severely traumatized. Mollica et al. (1987) found in their study of traumatic events experienced by the Indochinese, that their Cambodian patients had experienced more trauma and/or torture than the other Indochinese studied. The available literature reveals that the trauma and tortures endured encompass separation from family members, witnessing deaths of family members and friends, physical assault on personhood, rape, being forced to kill others, and going without food and water.

Additionally, the terrors involved in trekking on foot through the jungle to a refugee camp or by surviving the attacks of pirates at sea on an overcrowded vessel, are all a part of the traumas these people have endured. Between three and three and one half million people in a country of 7.5 million were butchered or starved to death (Sheehy, 1982).

Effects of Trauma on Victimized Individuals

Medical reports and psychiatric literature have documented the relationship between traumatic events occurring in a person's life and the phenomenon of stress and delayed stress reactions (Lifton, 1983). Figley (1978) reported that severe traumatic life events produce a unique set of symptoms and reactions that have been documented in experimental, clinical, and field studies. Traumatic events can produce long-term stress responses wherein the survivor is attempting to integrate the traumatic episode (Lifton, 1967; Gleser, Green, & Winget, 1981; and Niederland, 1968).

Although the severity of the psychological sequelae may vary in intensity, there is a plethora of documented evidence indicating that traumatic symptoms and psychological reactions exist in individuals who have been traumatized. In a study of individuals surviving prisoner of war and combat experiences, Arthur (1982) found that subjects suffered from psychological distress, manifested in symptoms of sleeplessness, suspiciousness, chronic anxiety, depression, recurrent and distressful dreams, and a startle reaction. Others (Biebe, 1975; Kral, Poyder, & Wigdor, 1967; Nefzger, 1970; and Strom, 1968) determined that physical and psychological distress existed in former concentration camp

prisoners after the Second World War. Similarly, Eitinger and Weisaeth (1980) noted intense responses to the traumatic experiences of hostages. Survivors of Nazi concentration camps have been reported at different times after their release or repatriation to suffer from symptoms identical to those of patients described as having post-traumatic stress disorder (Antonovsky & Maoz 1971; Chodoff, 1969; Eitinger, 1961; Hoppe, 1971; Niederland, 1968; Tuteun, 1966). Janoff-Bulman (1985) posited that while posttraumatic stress disorder is most often associated with Vietnam War veterans, those symptoms additionally describe individuals who have survived other traumatic events such as disasters, serious crime, and accidents. Many researchers also have noted the propensity for traumatic symptomatology in individuals who have survived different traumatic experiences. These symptoms can be found in individuals who experienced the trauma of rape (McDonald, 1979); the Holocaust (Furst, 1967; Krystal, 1968); the Hiroshima Blast (Lifton, 1967); in persons taken as hostages and imprisoned (Wolk, 1981); and in having been a prisoner of war (Corcoran, 1982; Ursano, Boydstein, & Wheatley, 1981).

Breslau and Davis (1987) recently wrote that Vietnam veterans who participated in atrocities have greater numbers of combat stressors and are more at risk for posttraumatic stress disorder. This research replicates previous work by Laufer, Frey-Wouters and Gallops (1984) who initially found that participation in atrocities markedly increased the risk of Vietnam veterans having posttraumatic stress disorder. Van der Kolk (1984) additionally emphasized the significance of the type and intensity of trauma endured and the development of social or psychiatric dysfunction.

Effects of Trauma in Refugee Populations

Since World War II, many researchers have noticed and studied the increased incidence of mental dysfunction in refugee populations (Eitinger & Grunfeld, 1966; Krupinski, Stoller, & Wallace, 1973; Pederson, 1949; Rumbaut & Rumbaut, 1976). In general, the results of studies indicate that traumatized refugee persons are at greater risk for developing mental disorders.

Sterba (1949) found that displaced children from the Nazi regime suffered from aggressiveness and depression in response to the losses of parents, homes, and country. Later, Allodi (1980) found Chilean refugee children and adults to have the prevalent symptoms of withdrawal, depression, weight loss, sleep disturbances, regressive behavior, and somatic complaints. Allodi and Cowgill (1982) identified a "torture syndrome" in a study of Latin American refugees in Canada. Torture victims in his study showed symptoms of severe anxiety, insomnia, suspiciousness, and somatization. Similarly, Chodoff (1975) and Trautman (1964) noted psychological dysfunction was the result of the concentration camp experience wherein individuals experienced the constant fear of death, loss of relatives, forced labor, deprivation of food and water, and meaningless arbitrary executions. They felt a "syndrome" resulted from the trauma of concentration camp experience and a similar and persistent symptomatology existed in those individuals suffering from this experience. Ostwald and Bittner (1968) found in concentration camp survivors, who years later were adapting, persistent symptoms still had long-lasting effects. Those symptoms which consistently existed in concentration camp survivors included sleep

disorders, anxiety, chronic depression, fatigue, recurring nightmares, hyperactive startle reaction, rumination, isolation, and irritability.

Tyhurst (1951) described displaced persons seen at a psychiatric institute in Montreal. In this classic study he found that initial reactions of euphoria gave way to a longer period of "psychological arrival." This period was characterized by suspiciousness, anxiety, depression, and somatic complaints. Similarly, Pederson (1949) also noted the prevalent symptoms of depression, and increased withdrawal with suicide attempts in response to social displacements among refugee populations.

Krumperman (1981) investigated the psychological consequences of violence in a refugee population. He found that the experiences of torture and rape resulted in somatic concerns, suspiciousness, and depression.

Eitinger (1984) described the problems concerning victims of violence and disaster to include the torment of anxiety, depression, sleeplessness, nightmares, dread of repetition of the frightening events, withdrawal from society, a sense of insufficiency, guilt, and extreme emotional liability.

Tyhurst (1977) found in his clinical and field experience of 27 years with Hungarian, Czechoslovakian, and Asian refugees, a characteristic cluster of symptoms. He described these symptoms as being represented by suspiciousness, vigilance, fatigue, generalized hypochondriasis, anxiety, and depression. One major component of the "social displacement syndrome" he described is the refugees' disorientation to time and place, accompanied by confused states and the

concomitant impairment of their interpersonal and social skills.

In a study of Jewish concentration camp refugees in Norway, Eitinger (1960) indicated that somatic complaints, restlessness, depression, and outbursts of crying and fainting were primary symptomatic manifestations of the effects of trauma.

In summary, based on the existing literature on the effects of trauma in differing refugee populations, it is evident that specific symptoms are common to those of the survivors of severe traumatic life episodes. Parson (1985) reported that although specific symptoms may vary in individuals, certain are common to most survivors of traumatic events. He described these as waking memories reminiscent of the original trauma or "flashbacks," somatic complaints, "traumatic" dreams, nervousness, irritability, explosiveness, problems in intimacy, withdrawal, and emotional numbing. The emotional reactions of depression, fear, anxiety, shock, helplessness, and confusion have been found to be common psychological experiences shared by a wide variety of victimized individuals (Janoff-Bulman, 1985). Additionally, the substantial body of literature on the emotional responses of victims and survivors indicates striking similarities and long-lived symptomatology. The psychological symptoms in refugee populations are comparable to those of individuals experiencing a wide variety of severe traumatic experiences.

Effects of Trauma in Southeast Asian Refugee Populations

Unfortunately, a paucity of research exists linking clinical descriptions of trauma with psychiatric disorders in any population, and specifically the Southeast Asian refugee population. Kinzie et al.

(1984) were the first to give clinical descriptions of a trauma-related psychiatric disorder in their description of 13 Cambodian concentration camp survivors. They found, in their sample of 13 Cambodian refugees who had survived two to four years of forced labor in Pol Pot concentration camps, that the DSM-III criteria for posttraumatic stress disorder (PTSD) as well as depression were met. The symptoms all of these refugees exhibited had lasted a minimum of three years after their concentration camp experience. Symptoms included nightmares, emotional numbness, avoidance, hyperactive startle reactions, and intrusive thoughts. Kinzie et al.'s (1984) study gives important cross-cultural validation to the diagnosis of PTSD in this unique Southeast Asian population.

Boehnlein et al. (1985) found in their one-year follow-up study of PTSD in Kinzie et al.'s (1984) sample of Cambodian concentration camp survivors that five of these refugees no longer met the diagnostic criteria for the disorder. Three refugees' symptoms had improved. The most consistent improvement was in the intrusive symptoms. These included sleeplessness, startle reactions, and nightmares. Symptoms with the least improvement were the refugees' sense of shame, social isolation, avoident behavior, and the ability to care for others. The authors pointed out that even the patient group that experienced a reduction in symptoms was still unemployed or unable to attend English as a Second Language instruction. They indicated the need for future research to address the issue of remission in such groups and the reemergence of previous symptoms.

Mollica et al. (1987), in the most recent and comprehensive overview of trauma-related symptoms in Indochinese psychiatric patients, found in 52 patients studied that each patient had experienced a mean of ten traumatic events and two torture experiences. Additionally, they found 26 of their patients with the diagnosis of PTSD had experienced an average of twice as many traumatic events as other patients with other diagnoses. They also found their Cambodian patients had experienced more trauma and torture than Vietnamese or Laotian patients. The Cambodian patients additionally met the DSM-III criteria for a diagnosis of major affective disorder. Both Kinzie et al. (1984) and Mollica et al. (1987) have revealed that many Indochinese patients suffer from PTSD as well as another illness, usually major affective disorder. Mollica et al. (1987) indicated the importance of PTSD as a secondary diagnosis, and their study at the Indochinese Psychiatry clinic revealed that PTSD was almost always associated with another disorder. Their findings "point to the importance of conducting epidemiologic studies in refugee communities to determine the extent of traumatic experiences and the prevalence of psychiatric disorders in non-patient populations" (Mollica et al., 1987, p. 1570).

August and Gianola (1987) hypothesized that Southeast Asian refugees and Vietnam veterans suffer similar symptoms from disorders induced by war trauma. They indicated that no large-scale epidemiological studies have been conducted on Southeast Asian refugee populations to verify the incidence and prevalence of PTSD or other trauma-related disorder in this population. They further suggested that war and trauma-related psychological distress may be prevalent in Southeast Asian refugee

populations. Their article points to the lack of research in this important area.

At this writing, only two published articles exist connecting trauma with posttraumatic stress disorder in Southeast Asian refugees. Westermeyer (1985) predicted that mental health problems will continue in the next few decades in the Southeast Asian refugee population. It is important for researchers to address the lack of research on Southeast Asian refugees and mental disorders. More information would add to the body of literature and could help alleviate unnecessary suffering in Southeast Asian refugee populations.

Psychosocial Adjustment in Southeast Asian Refugee Populations

Early studies on the resettlement of Indochinese refugees focused on the first wave, who appear to have adjusted more successfully than later or second wave refugees. One major early study by Montero (1979) sampled 15,000 Vietnamese refugees between July 1975 and August 1977. This study found that, in spite of cultural and language barriers, 94 percent of these refugees were gainfully employed. Their employment indicated downward occupational mobility, most significantly in Vietnamese who had been in managerial or professional capacities in their own country.

Another major early adjustment study by Vignes and Hall (1976) on 50 Vietnamese families living in Baton Rouge, Louisiana, concluded these refugees had made a good adjustment with only four percent of these families receiving welfare. This study also estimated the prevalence of mental disturbance among the entire population of 488 Vietnamese in Baton Rouge. They found the prevalence of psychiatric disorders and the

concomitant treated incidence of mental illness to be no greater than that of the general population. This study concluded the Vietnamese had few difficulties in adjusting to life in America.

Rumbaut (1977) suggested that even under ideal circumstances, a refugee's emotional resilience is fully tested, in that the resettlement process is a high demand, low control situation that causes severe psychological distress even among the best prepared refugees. Starr, Roberts, LeNoir and Nguyen (1977) studied 350 Vietnamese who had been in the United States an average of three years in Florida, Alabama, Louisiana, and Northern California. They found that these refugees had good jobs, spoke good English, and earned more money than other previous refugee groups. However, these Vietnamese refugees suffered mental health problems and a variety of psychosomatic complaints.

Lin, Masuda, and Tazuma (1979; 1982; 1984) reported their results from a longitudinal study on the psychosocial adjustment of the first wave of Indochinese refugees. Their sample was composed of 282 Indochinese refugees. Forty of these refugees were evaluated in all three phases of their study. Over a three-year period these refugees had made a remarkable resettlement based on employment, decrease in public assistance, home ownership, and other areas pertaining to adjustment in the United States. They found, however, through the Cornell Medical Index, that these same refugees consistently experienced high emotional stress over the entire three-year period of the study. At least one half of these refugees had scores on the Cornell Medical Index indicating severe psychological distress. The authors pointed out that although these refugees had adapted to their new life socially,

they continued to experience extreme psychological distress. It seems that external social adaptation does not mean that internal psychological problems are necessarily resolved.

More recent studies focusing on the second wave of refugees (arriving from 1979 to the present) are unfortunately far less optimistic than earlier studies. Kim (1980) found, in a survey of 1,627 heads of Indochinese households in Illinois, that these refugees lived in marginal circumstances. The majority were either unemployed or severely underemployed. Additionally, he found these Indochinese refugees had few marketable skills and little language ability in their new country. Barbara, Neuwirth, and Clark (1980) found Southeast Asian refugee families in Canada to have the same experiences as the study by Kim (1980) in America indicated.

Bruno (1984), in her work with the Khmer in New York City, found acculturation difficulties abounding in this population. She cited poor housing, language barriers, hostility from Americans, as well as "survivor guilt" (Lifton, 1967) among resettled Khmer as causing them many problems. Additionally, many refugees face a loss of status in their employment, causing depression. Other refugees who were rice farmers in Cambodia found American employment extremely complex. Bruno (1984) also pointed out that most Khmer refugees suffer from prolonged malnutrition. As a result, dental problems, hepatitis, anemia, intestinal parasites, and tuberculosis are extremely prevalent in resettled Khmer refugees.

Haines (1982) addressed several general reemergent themes in the assimilation of Indochinese refugees in America. His research focused

on the initial problems Indochinese refugees must address as well as economic adjustment. Haines (1982) defined serious health problems, the lack of English language, a lack of understanding as to how things work in the United States, availability of rental housing, and the constant worry over family left in the course of exodus as the major problems for Indochinese refugees in America. In regard to employability, Haines (1982) pointed out that even when these refugees are employed, their wages are not sufficient to support the needs of the household.

Rumbaut (1985; 1986), in one of the most comprehensive studies on the adaptation of Indochinese refugees called the Indochinese Health Adaptation Research Project (IHARP), researched pre- and postmigration variables relating to adaptation of refugee families in San Diego County, California. Forty thousand Indochinese refugees in San Diego County were randomly sampled, and respondents were interviewed at length in 1983 and again in 1984. Rumbaut (1985; 1986) found three out of four families had gross annual incomes well below the poverty line. The poverty rate, unemployment rate, and welfare dependency rate of these refugees were much higher than the general population or other groups in San Diego County. He also found these refugees lived in low-rent districts, in overcrowded conditions, with a mean of 2.0 families sharing an apartment. The psychological adjustment of these refugees was assessed through a "Psychological Well-Being Scale" as well as open-ended, in-depth interviews. Rumbaut (1985; 1986) found mental health problems to be especially severe among the Khmer and Hmong ethnic groups. Depressive symptomatology was especially high among those refugees with the most traumatic migration histories as well as older

refugees, the widowed, those dependent on welfare and those with the least English proficiency. Six out of ten Hmong and Khmer refugees additionally reported sleeplessness, loss of appetite, and nightmares. Particularly significant was the fact that the "Khmer refugees had higher scores on depression than any other ethnic group previously studied with similar measures" (Rumbaut, 1985, p. 31). Rumbaut's (1985; 1986) research suggests that serious economic, cultural, and psychological problems affect the adjustment of Indochinese refugee populations in America. He emphasized the need for more prevention and policy-oriented research, including mental health research, to help these refugees.

Brown (1982) found a number of emotional influences affect the more tangible issues of refugee resettlement, such as employment, housing, and English language proficiency. He described the refugees' most difficult problem as separation from family members. Although these refugees may have safety and material well-being, Brown (1982) suggested the importance of family causes the Indochinese refugee with family left behind immense worry and guilt. Additionally, "survivor guilt," downward occupational mobility, frustrations over worthlessness and failure (leading to domestic violence and alcoholism), communication and cultural barriers, as well as intergenerational conflicts, all affect the ability of the Indochinese refugee to make a successful adjustment.

In a report on the physical and emotional needs of Indochinese refugees in America, Robinson (1980) emphasized that the prolonged conditions of severe physical and emotional stress have caused these people problems in their adjustment. He noted that these refugees are

"still vulnerable from their anguishing experiences and are confronted with the baffling complexities of resettlement and adjustment to life in this country" (p. 24). He added that many Indochinese refugees suffer depression over a sense of frustration and helplessness.

In other countries, researchers have found similar findings among resettled Southeast Asian refugees. Nguyen (1982), working in Canada, found in 38 referrals to the Homewood Sanitarium in Guelph, Ontario, that 40 percent of these refugees suffered depression. Similarly, a study by Li and Coates (1980) of the psychosocial adaptation of Vietnamese refugees in British Columbia revealed a high degree of depression and suicide attempts. They concluded that the difficulties of these refugees were due more to their adaptational circumstances than to personal concerns.

In Australia, another major country of resettlement for Indochinese refugees, Hawthorne (1982) found a definite psychological pattern to emerge among refugees there. Initially, these refugees experienced a great deal of happiness and hope for the future. This waned, however, and guilt, sadness, emptiness and a variety of psychosomatic complaints were experienced. Young (1982) reached similar conclusions in his work with resettled Indochinese, also in Australia. He found depression, isolation, lack of English skills, bereavement, and guilt over the loss of family members to impede a smooth resettlement process for refugees.

In summary, the literature indicates the psychological adaptation of resettled Indochinese refugees has been beset with a multitude of difficulties. Acculturation for these refugees is at best a situation producing severe psychological disturbances, even when social adjustment

appears to be reasonably adequate. The overwhelming complexity of American or urban life, cultural differences, language barriers, availability of poor housing, downward occupational mobility, effects of prolonged malnutrition, the psychological consequences of surviving extreme trauma, hostility in the receiving country, "survivor guilt," isolation, frustrations over feelings of worthlessness, intergenerational conflicts, and economic difficulties are only a part of the realities these refugees face in their country of resettlement. The fact that serious psychological problems exist in this population is understandable, given the inherent difficulties refugees bring with them in addition to the task of adjusting to a drastically different lifestyle and environment.

Impediments to Adjustment in Southeast Asian Refugees

Secondary Migration

Secondary migration refers to the decision of a refugee family to move from the initial resettlement placement to another location. It is a phenomenon that has serious implications for the refugee families, sponsors, and voluntary agencies involved in the resettlement process. Secondary migration among refugees is a serious concern to the federal government and to voluntary agencies in terms of sponsorship development in the community for refugees awaiting placements (McInnis, 1983). McInnis (1983) reported a dramatic rise in the incidence of secondary migration which impedes adjustment in Indochinese refugees and generally causes a high concentration of welfare dependent refugees.

Researchers have indicated a number of reasons why Indochinese refugees choose to migrate, causing them more difficulties and change in

their already overburdened lives. Haines (1982) reported that although few data exist on the extensiveness of kinship reunion as a motivating factor for refugees in secondary migration, this seems to be a major concern of these refugees.

Thomas (1981) suggested that secondary migration is a process by which refugees attempt to integrate housing, employment, and family unification. Douglas (1984) attributed the great growth in the number of refugees in California to secondary migration. He contended the Indochinese refugees migrate to California because of higher welfare benefits, employment opportunities, an established ethnic community, reunification with relatives, and a congenial climate. McInnis (1983) reported cultural diversity, depression, and racism experienced by Khmer refugees also affect secondary migration. Secondary migration has been found to further exacerbate the difficulties and adjustment of many Southeast Asian refugees.

Occupational Assimilation

The major concern of the federal government in the resettlement of refugees is their capacity to achieve self-sufficiency in the United States. Stein (1979) reported evidence to indicate that occupational and economic adjustment tend to reflect the socio-cultural adjustment of the Indochinese refugee. He contended occupational adjustment relates to overall adjustment, and "mental health workers assisting the Vietnamese have identified several types of mental problems, some of which have their roots in occupational problems" (p. 28).

In an ethnographic study of Vietnamese in Santa Clara County, California, Finnan (1980) found occupational and thus economic

assimilation led to successful acculturation for these refugees. She found that reinforcement by the ethnic community for jobs as technicians or assemblers in the electronics industry led to enhanced self-images for the refugees, and, thus, to greater occupational and overall adjustment.

Southeast Asian refugees resettling in the United States unfortunately experience great difficulty in their attempt to be assimilated into the labor force. Strand (1980), in a study of Hmong, Lao, Khmer, and Vietnamese in the San Diego area, found English language communication skills were a major barrier to refugee employment. He discovered gender, age, and pre-arrival education did not predict employment status. Instead, English language skills were vital to refugees arriving in the United States. Chances of employment were quite bleak for refugees from camps where there was very little or no English instruction.

Stein's (1980) study of occupational adjustment of Vietnamese refugees found great downward occupational mobility. He reported "generally, the higher one's former occupational status the worse the adjustment" (p. 38). Among the least acculturated refugees he found evidence of poor mental health, dependency, and other signs of maladjustment.

Bach and Bach (1980), in their review of employment patterns among Southeast Asian refugees, found that although earlier arrivals had obtained jobs more successfully than later or second wave arrivals, second wave arrivals worked long hours with little income gain. Later arrivals spoke less English and thus faced more employment problems.

Bach and Bach (1980) also found secondary migration influenced employment negatively.

In summary, it has been found Indochinese refugees experience many problems in their occupational and economic adjustment which, in turn, influence overall adjustment.

Underutilization of Mental Health Services

Many researchers have indicated that Indochinese populations underutilize existing mental health services. Sue and McKinney's (1975) study of Asian American patients in California and Seattle, Washington, found rates of psychopathology to be underestimated. They concluded treatment facilities were not adequately responding to their needs. Sue and Morishima (1985) concurred that Asian Americans are less likely than Caucasian Americans to seek mental health services for emotional problems. Nguyen (1984) also indicated mental health facilities are greatly underutilized by this group. Robinson's (1980) report on physical and emotional health care needs of Indochinese refugees supported the contention that a very minute percentage of Indochinese refugees avail themselves of mental health services. Mollica, Wyshak, Coelho, and Lavelle (1985) reported "the general impression is that Indochinese refugees 'underutilize' mental health services" (p. 23).

The obvious implications of such a high risk group underutilizing mental health services are the unnecessary and prolonged suffering of these refugees and their families. Hill (1985) emphasized how the use of mental health services by refugees can ease their adaptation to a new society. Pederson (1981) and Draguns (1981) stated that without the

availability of these services, adaptation may be impeded, and depression and alienation may persist.

Several explanations have been offered for the underutilization of mental health services by Indochinese refugees. Nguyen (1984) outlined seven major reasons why this phenomenon may exist: unfamiliarity with North American mental health concepts, the stigma of mental illness in Asian societies, the use of family and extended kinship, the availability of alternative resources, cultural explanations of mental illness, lack of information and accessibility, and the lack of culturally appropriate mental health services.

Underutilization of mental health services by Indochinese refugee populations has been found to exacerbate problems inherent in the adaptation and cultural transition of this troubled and high risk group.

Psychiatric Problems in Southeast Asian Refugee Populations

Southeast Asian Children and Adolescent Refugees

Following World War II, refugees from Europe were found to have an increased incidence of mental health problems. These problems existed despite the similarity in the native culture the refugee came from and the receiving culture (Eitinger, 1959; Helwig-Larsen, Hoffmeyer, Kieler, Thaysen, Thygesen, & Wulff, 1952; Pederson, 1949). Krupinski, Stoller and Wallace (1973), in a classic study of World War II European refugees in Australia, found eastern Europeans to have five times the incidence of schizophrenia than Australians, a difference they related to the trauma of war experiences. Throughout history, refugees resettling in foreign countries have experienced mental difficulty. The Southeast Asian refugee is no exception.

The Southeast Asian refugees in America represent a population at high risk for mental disorders. Kinzie et al. (1980) stated these refugees are often overwhelmed by the complexities of American life. Resettlement workers, clinicians, and other practitioners who have worked with this population agree they are prone to emotional difficulties, given the premigration stresses associated with sudden uprooting, forced expatriation, and the postmigration stresses of adjusting to an entirely new culture (Pederson, 1949; Rumbaut & Rumbaut, 1976; Tyhurst, 1951). Robinson (1980) reported that the trauma of violent uprooting, separation from friends and family, and long uncertain waiting in refugee camps in Southeast Asia cause these refugees considerable emotional problems. Nguyen (1982) emphasized that, while some Indochinese refugees have resettled successfully, there is evidence a significant number are having emotional problems. He defined their psychological problems as being associated with the "traumas of the war, the lack of preparation before leaving their homelands, uncertain holding periods in over-crowded and unsanitary camps, and the necessity of their adjustment to a foreign culture and environment" (p. 26). Tung (1985) reported that it takes no special knowledge to recognize Southeast Asian refugees have emotional problems, due to the fact they are new in America, speak little or no English, and are aliens in a foreign country.

In their study of psychiatric problems in adolescent Southeast Asian refugees, Williams and Westermeyer (1983) found of 24 patients seen in the Department of Psychiatry at the University of Minnesota Hospitals, those with a psychiatric diagnosis had some premorbid

psychological impairment. However, after immigration to the United States their problems were exacerbated. The primary complaints of these adolescent refugees were suicide attempts, psychosis, and disruptive behavior. The problems of these adolescent refugees occurred in conjunction with other factors related to the loss of country, family, and the stress of postmigration adjustment.

Duncan and Kang (1984), in their work with Southeast Asian unaccompanied refugee minors, identified 47 Cambodian youths suffering grief over their extreme losses. In a unique mental health program incorporating the use of traditional Cambodian culture, 42 of these children who had recurrent disturbing dreams of family members, found relief in the cessation of these dreams after participation in a traditional Khmer ceremony.

Among unaccompanied adolescent Southeast Asian refugee children in a refugee camp, Looney (1979) found severe psychiatric symptoms were prevalent, particularly depression and transient psychotic episodes. Harding and Looney (1977) found among Southeast Asian children in refugee camps that psychiatric and pediatric evaluations revealed a high degree of depression. They also reported somatic complaints were the most prevalent indicator of distress, and withdrawal, sleep dysfunctions, tantrums, and violent antisocial behavior were also found. Harding and Looney's (1977) experience in a refugee camp with predominantly Vietnamese children additionally revealed the adaptability of Vietnamese children with families and the extreme vulnerability of unaccompanied refugee children. Tobin and Friedman (1984) indicated that Southeast Asian refugee adolescents may not emerge with strong

identities, in that developmentally they were dealing with the critical Eriksonian issues of trust versus mistrust and autonomy versus shame during times in their parents' lives when the parents were depressed, emotionally unavailable and preoccupied.

Kinzie, Sack, Angell, Manson, and Rath (1984) found among 40 Cambodian adolescents having lived for four years under the Pol Pot regime in Cambodia that 20 adolescents met the DSM-III criteria for posttraumatic stress disorder. These students were examined four years after their traumatic experiences. Twenty-one Khmer students also exhibited symptoms of depressive disorder. Additionally, they found Khmer adolescents not living with a family member or those who had lost their entire family during the Pol Pot regime predictably had the diagnosis of a major psychiatric illness.

Krupinski and Burrows' (1986) comprehensive study of Southeast Asian refugee children, adolescents, and young adults in Australia found that rates of psychiatric disorder were initially twice what was found in the Australian population of the same sex and age. They found, in a two-year follow-up period for children, adolescents, and young adults, that the prevalence of psychiatric disorders had dropped to a level significantly less than that of the general Australian population. Krupinski and Burrows (1986) discovered among this refugee group that refugees who initially presented with anxiety and depression were symptom free after two years in Australia. Their study is unique in that they found no evidence to support emotional and behavioral difficulties in Southeast Asian refugee children and adolescents in response to the trauma of their escape and refugee experiences.

Explanations of their unexpected findings include factors such as the premorbid psychological disposition of their group of refugees and the nature of the refugee selection process by Australian and United Nations officials.

Southeast Asian Adult Refugees

In comparison to the plethora of research on the psychosocial adjustment of Southeast Asian refugees there is a very limited number of studies related to research on psychiatric disorders. Mollica and Lavelle (1988) indicated that no epidemiological studies document the prevalence of psychiatric disorders in any of the Southeast Asian refugee communities. It is unfortunate this situation exists given this population's propensity for serious psychiatric disorders due to the psychological and physical trauma they have endured, as well as postmigration stressors such as economic self-sufficiency (Robinson, 1980).

During a two-month period in 1980, Alley (1982) found that, out of a total population of 4,192 Indochinese refugees in Utah, 98 were identified as having emotional difficulties. Ten of these 98 were identified as suicidal. Alley discovered that this suicidal group of refugees suffered from a reactive depression. He found the most important factor in those refugees considering suicide to be the theme of loss. The sudden loss of a significant loved one precipitated suicide attempts or preoccupation with suicide in all subjects in his study. However, this study did not detail the procedures entailed in identifying emotional difficulty in this Indochinese refugee population or how suicidally inclined Indochinese refugees were assessed. The

study, additionally, lacks operational definitions on how the data collected through clinical observation within a counseling context were determined. This seriously mitigates the generalizability of the results of this study.

Boman and Edwards (1984), in clinical work with Southeast Asian refugees resettled in Australia, indicated no Australian studies have been published documenting the epidemiology of psychiatric disorder among Indochinese refugees in Australia. The only published work now in Australia regarding psychiatric disorders is that by Krupinski and Burrows (1986) with Indochinese children, adolescent, and young adult refugees.

In their health assessment of 194 Indochinese refugees at a general health clinic, Hoang and Erickson (1982) found during a six-month period that 10 percent of refugees had significant psychiatric disorders. Their study failed, however, to give the criteria determining psychiatric illness or methods for determining that illness. They also emphasized the phenomenon noticed in Hmong refugees of sudden, unexplained nocturnal death. In the 38 cases reported of such deaths, all victims were in good health, and in 30 cases autopsy studies revealed no apparent cause. Tobin and Friedman (1983), in a case study of a Hmong refugee, indicated that the stressors of war, flight, and relocation may be linked to the sudden death syndrome found in the Hmong population.

Vignes and Hall (1979), in a controversial study on the adjustment of 50 Vietnamese families selected from a total population of 488 Vietnamese living in Baton Rouge, Louisiana, found only 11 of these

Indochinese refugees to have any psychiatric disorder. Nine of these 11 patients were diagnosed as psychotic. They concluded that the prevalence and treated incidence of these refugees' psychiatric disorders were not significant. Their study has been the subject of great controversy in that the actual numbers of psychiatric disorders have not been found to be accurate through data obtained on refugees treated in mental health centers (Mollica & Lavelle, 1986).

Lin, Tazuma, and Masuda (1979), in a study of Vietnamese refugees, compared the scores of 150 refugees with those from the general population on the psychological section of the Cornell Medical Index (CMI). These researchers found over half of the refugees consistently had high scores, indicative of severe psychological disturbance. The mean score of the refugees was 12, above the cut-off of 10 used to indicate serious dysfunction. Similarly, Cohon (1979) collected data on 54 Indochinese refugee clients treated between 1977-1978 at a federally funded mental health project for Indochinese refugees and found depression prevalent in 92 percent of these patients.

Westermeyer, Vang, and Neider (1983a, 1983b) reported that, out of 97 Hmong refugees living in Minnesota, 17 became psychiatric patients over a 12-month period. Westermeyer et al. (1983a, 1983b) additionally established that 60 percent of these Laotians have significant emotional problems based on their responses to two self-rating scales, namely, the Zung Scale for Depression and the SCL-90, both of which were translated into the Hmong dialect by one of the authors. Premigratory and postmigratory factors were examined in relation to these self-rating scales. Westermeyer et al. (1983a, 1983b) found specific

characteristics to be associated with fewer emotional difficulties and less psychopathology on the self-rating scales. Additionally, they discovered the most common clinical symptoms to involve depression. Under the DSM-III criteria all of the patients experienced severe depressive syndromes and all were classified under "transient situational disturbance" (Westermeyer et al., 1983b).

Kinzie and Manson (1983), in their five-year experience with Indochinese refugee psychiatric patients, treated 263 patients. They described the most common presenting complaints to be multiple somatic symptoms. They additionally found that 49 percent of these patients met the diagnostic criteria for major affective depressive disorder. Fifty patients were evaluated as schizophrenic and two thirds of these patients presented psychotic symptoms such as delusions, hallucinations or bizarre behavior. They concluded that somatization is a prevalent expression of emotional difficulties in Indochinese refugee patients, and psychiatric services can be administered in a culturally relevant manner to this population.

In an earlier study, Kinzie, Tran, Breckenridge, and Bloom (1980) revealed that of 50 patients initially treated at an Indochinese refugee psychiatric clinic in Oregon, 18 patients were psychotic (17 were schizophrenic and 1 was manic), 21 were depressed, and 6 suffered from anxiety disorders. They indicated that initially the patients they saw were extremely disturbed and psychotic. As the clinic became more accepted in the Indochinese community, the refugees' problems were more similar to those seen in a university psychiatry clinic.

The more recent studies on posttraumatic stress disorder among

survivors of Cambodian concentration camps (Kinzie et al., 1984; Boehnlein et al., 1985) concluded that all the Cambodian patients had suffered symptoms for at least three years, with the intensity not lessening over time. After one year of treatment, patients showed marked improvement in the "intrusive" symptoms such as nightmares, insomnia, startle reactions, and hypervigilance. Bohnlein et al. (1985) suggested, however, that the symptoms of denial, such as poor social withdrawal and low interest, were not conducive to change.

Mollica et al. (1987), in the most recent study of the impact of war trauma and torture on Indochinese refugees, concluded that of 52 psychiatric patients, 50 percent suffered from posttraumatic stress disorder and of the 26 patients not having this disorder, 15 had trauma related syndromes. They reported Cambodian refugees to be the most severely traumatized group and Cambodian women without spouses to have the most severe psychiatric impairments. They also discovered that the majority of the Southeast Asian refugee patients referred for psychiatric intervention had suffered from multiple traumatic events (p. 1569). Additionally, it is significant that a high percentage of these psychiatric patients have major affective disorder in conjunction with posttraumatic stress disorder. Mollica et al. (1987) concluded that their study revealed the severity of the multiple traumas the Indochinese psychiatric patients suffered.

In summary, it is evident that the great majority of literature on the psychiatric problems of Southeast Asian refugee adults links the traumatic experiences they suffered with psychiatric disorders. However, in some instances, it appears that the incidence of psychiatric

disorders or psychological problems is low among Indochinese refugee populations. These discrepancies exist due to methodological problems inherent in these particular studies.

Overall, the Khmer refugees having experienced the Pol Pot regime are a particularly vulnerable group, at high risk for psychiatric disturbances. The incidence of depression and posttraumatic stress disorder has been found to be prevalent in Indochinese refugees, particularly the Khmer. Mental health providers working with this unique population should be sensitized to the fact these refugees frequently somatasize their emotional complaints. Additionally, as Mollica et al. (1985) indicated, "mental health providers should be able to diagnose organic brain syndromes, schizophrenia, posttraumatic stress disorder, and major affective disorder" (p. 377). The major researchers in this area have emphasized the difficulty in working with these patients, not only because of cultural barriers, but the intensity and tragedy of the traumatic experiences of their clients. Given the number of these refugees and the magnitude and severity of their psychological disturbances, there is a paucity of available literature on studies conducted with this group. Further research is needed in psychiatric and nonpsychiatric populations to determine the incidence of psychiatric disorders and the extent of the traumatic episodes suffered in this population. Such research will help to determine whether posttraumatic stress disorder is prevalent in this population and whether another trauma-induced disorder such as dissociative disorder is found in the Indochinese refugee population.

Dissociation

Dissociative disorders and dissociative phenomena are receiving increasing emphasis in the literature. Particularly in the area of psychic trauma, dissociative reactions are overwhelmingly pervasive. Currently, attempts are being made to study the effects of trauma, dissociation, and related psychological disorders such as posttraumatic stress disorder.

The psychological phenomenon of dissociation was a concept first introduced by Janet in 1889. He described dissociation as a process wherein mental processes could be split off from the primary personality or the mainstream of consciousness (Price, 1987). Similarly, Prince (1906) considered the mechanism of dissociation to encompass a "co-consciousness" which he defined as normal consciousness divided into separate units. Rendon (1973) indicated that Prince's concept of dissociation was synonymous with disintegration.

Hilgard (1977) described the concept of dissociation as consciousness occurring not in solitude but simultaneously on varying levels. Hart (1926) described the process of dissociation in a similar manner, indicating that the mind is not separated into pieces but contains units which perform independently of one another. These units are divided from consciousness and may or may not have access to one another.

Gruenewald (1986) differentiated between dissociation defined as a descriptive term for a process and the kind and extent of the dissociation given to the dissociative state. Dissociation as a

process then is distinguishable from dissociation as a diagnostic category, representing dissociative disorders.

The DSM-III-R (American Psychiatric Association, 1987) identifies the five categories that represent dissociative disorders as multiple personality disorder, psychogenic fugue, psychogenic amnesia, depersonalization disorder, and dissociative disorder not otherwise specified. The definition of dissociation in the DSM-III-R (1987) describes as the essential feature "a disturbance or alteration in the normally integrative functions of identity, memory, or consciousness. The disturbance or alteration may be sudden or gradual, and transient or chronic" (American Psychiatric Association, 1987, p. 269). Putnam (1985) indicated that two characteristic features predominate in most dissociative disorders. These features are a disturbance in an individual's sense of identity and a disturbance in an individual's memory. Gruenewald (1986) described dissociation and dissociative disorders as shifting across levels of functioning with no distinct demarcation to define "normal" or pathological. Multiple personality disorder would represent the most severe form of dissociation with the least severe forms being observed in everyday life (Gruenewald, 1986). Similarly, McKellar (1977) described dissociation as being an absent-mindedness when individuals become so preoccupied with their own imagery they lose touch with reality.

It appears that dissociation is a phenomenon that lies on a continuum, occurring in varying degrees of pathology in normal individuals as well as those with dissociative disorders (Bernstein & Putnam, 1986; Kirshner, 1973; Nemiah, 1980). Less severe forms of

dissociation occur in normal persons (McKellar, 1977) and may coincide with everyday absent-mindedness (Kirshner, 1973). In fact, Barnes (1980) described case reports wherein partial dissociative experiences emerged in individuals as the result of travel and fatigue. Sullivan (1954) described minor instances of dissociation as "selective inattention" where individuals ignore or do not notice many details of everyday living.

More severe forms of dissociative reactions are characterized by disturbances in memory and identity (Nemiah, 1980; Putnam, 1985). Multiple personality disorder, characterized as the most severe and chronic dissociative reaction wherein alternate personality types perform specific roles or functions in an individual's life is linked with experiencing extreme psychic trauma (Putnam, 1985, 1988). Cattell (1972) reported that depersonalization and derealization, both severe forms of dissociation, were the third most frequently encountered emotional problem in hospitalized psychiatric patients following symptoms of anxiety and depression. These forms of dissociation were often related to traumatic life events. Similarly, Blank (1985) and Kolb (1985) found dissociative symptomatology in their studies of subjects suffering from posttraumatic stress disorder (PTSD). Brende (1985) also discovered many hospitalized Vietnam combat veterans having PTSD and dissociative symptoms ranging on a continuum from intrusive recollections to multiple personality disorder.

Dissociation is a complex psychological phenomenon that usually occurs in an individual experiencing significant stress (Putnam, 1985). Various types of dissociative reactions are commonly found in most

diagnostic categories of psychiatric patients, with less severe forms presenting in individuals with no pathology. Dissociation is best thought to lie on a continuum from more to less severe.

The focus of dissociation has emerged throughout the years to encompass more behavioral aspects of the phenomenon. Current emphasis centers on reports of experiences and observable behaviors of individuals diagnosed as having dissociative disorders. In many instances, extreme trauma is related to severe forms of dissociation such as multiple personality disorder (Bliss, 1980; Kluft, 1985; Putnam, 1985, 1988). However, the relationship between dissociation and trauma has received little empirical validation (Spiegel, 1986). Understanding and studying the relationships between dissociation, trauma, and other psychological disorders such as posttraumatic stress disorder should further substantiate the important role extreme psychological trauma plays in the development of dissociative disorders.

Posttraumatic Stress Disorder

Posttraumatic stress disorder (PTSD) is a diagnostic entity which requires the existence of four cardinal criteria outlined in the DSM-III-R (American Psychiatric Association, 1987) as follows: a) a history of a traumatic event; b) a re-experiencing of the event through memories, dreams, or symbolic aspects of the original trauma; c) avoidance of stimuli in some way reminiscent of the trauma or a general numbing response; d) symptoms of increased arousal such as hypervigilance or difficulty in sleeping (American Psychiatric Association, 1987).

Much empirical validation has been given to the symptoms that comprise the description of posttraumatic stress disorder in the DSM-III and the DSM-III-R in recent years (Laufer, Brett, & Gallops, 1984; Laufer, 1985; Silver & Iacono, 1984; Solomon & Mikulincer, 1987; Ursano et al., 1981; Yager, Laufer, & Gallops, 1984). According to the DSM-III-R, PTSD appears to be "more severe and longer lasting when the stressor is of human design" (American Psychiatric Association, 1987, p. 248). Pearce, Schaver, Garfield, Ohlde, and Patterson's (1985) study of 90 male Vietnam-era veterans not only empirically supported the diagnostic category of PTSD in the DSM-III, but also supported the belief that PTSD is more severe following a deliberate man-made disaster than after a natural or accidental one. This hypothesis is now generally accepted; studies validate psychological problems as being greater in magnitude and longer-lasting in man-made disasters (Green, Lindy, and Grace, 1985; Luchterhand, 1971). Frederick (1980) indicated that survivors of man-made disasters in contrast to victims of natural disasters have the added psychological burden of guilt about the plight of survivors. Janoff-Bulman (1985) reported that self-blame is a suprisingly common reaction following victimization.

Van der Kolk (1984) indicated that the nature of the trauma, the age and personality of the victim, and the social support system following the traumatic event all impact on an individual's ability to sustain trauma without lasting effects or to mitigate fixation on the trauma. In particular, Van der Kolk (1984) emphasized the loss of social support as being an important cause in an individual's inability to overcome the effects of trauma. Wilson and Krauss' (1985) study

additionally indicates that posttrauma adaptation is facilitated by the recovery environment to which the survivor returns. In fact, the best predictor variable for six of the seven PTSD dimensions was psychological isolation upon returning home. The authors indicated that under optimal conditions the recovery environment would provide community, social, medical, psychological, and emotional support facilitating the recovery process. Southeast Asian refugees in America, having lived through the holocaust of the Pol Pot era, and then relocated to a foreign country certainly experience disruption of the social support so necessary for people to remain intact after severe psychological trauma.

An important aspect of PTSD increasingly addressed in the literature is the effects of psychic trauma and the element of time. Evidence suggests that stress symptoms following exposure to severe trauma persist over time and may increase in their severity (Archibald & Tuddenham, 1965; Chodoff, 1970; Leopold & Dillon, 1963; Strom et al., 1962; Ursano, Boydston, & Wheatley, 1981). Gleser, Green, & Winget's (1981) study of survivors of the flood at Buffalo Creek in 1972 found a prolonged stress syndrome was the common pattern, and five years after the flood one third of their sample continued to suffer from severe symptoms. Similarly, Terr (1983) found that every child in his study of 25 school bus kidnapping victims in Chowchilla, California, suffered from a posttraumatic stress response syndrome as late as four to five years after the incident. Scurfield (1985) emphasized that the longer PTSD goes untreated, denial patterns and dysfunctional coping become an integral part of an individual's life. Van der Kolk (1984) indicated

that for this reason acute trauma is best treated soon after it occurs. If not, defenses against the memory of the trauma become dominant, walled off from consciousness, and often dissociated.

Van der Kolk, Boyd, Krystal, and Greenberg (1984) contended that untreated individuals suffering from PTSD are "addicted" to the response of their original trauma. Re-exposure to traumatic situations evokes an opioid response in the brain similar to that seen in animals in response to inescapable shock. In untreated PTSD survivors, re-exposure to the trauma may produce an opioid response that may be subjectively experienced as a sense of control over overwhelming emotions (Van der Kolk et al., 1984). It could also explain why many with PTSD abuse alcohol. Arnold (1985) reported many veterans with PTSD frequently used alcohol to "self-medicate" to control anxiety, insomnia, or to comfort dysphoria. It could be that the numbing effects of alcohol reduce the body's desire for the opioids to which it has become addicted.

The "stressor criterion" or the extent and severity of the traumatic event has received much attention in PTSD literature in recent years. Ursano (1987) argued that in studies of extreme trauma, the quantity of the stressful experience seems to be the best indicator of emotional breakdown. New research in this area indicates that the kind and degree of stressor or traumatic event is positively correlated to the intensity of psychopathology. Gleser et al.'s (1981) empirical and psychiatric analysis of the Buffalo Creek flood survivors revealed the primary indicators of PTSD were severity of stressors encountered during the flood and the degree of bereavement experienced by the victims.

Ursano et al. (1981) found in their study of Vietnam-era prisoners of war that a correlation existed between psychiatric pathology and the intensity of their subjects' battle experiences. Similarly, Solomon & Mikulincer's (1987) study of Israeli veterans found combat veterans suffering from PTSD differed markedly from noncombat veterans in their diminished ability to function in social, family, and work environments.

Laufer, Brett, and Gallops' (1985) study demonstrated that the witnessing of abusive violence indicated increased psychopathology in Vietnam veterans. This is related to work by Matessek (1975) who found specific experiences in death camps among Holocaust survivors indicated longer-term PTSD symptomatology. A study by Sales, Barem, and Shore (1984) additionally suggested that degree of violence in a rape assault affected PTSD symptoms. Later, Green, Grace, and Glesers' (1985) study of survivors of a Beverly Hills supper club fire reported exposure to grotesque death, injury, threat to life, and traumatic bereavement were all predictors of higher incidences of psychopathology.

Wilson and Krauss (1985), in a classic study with 114 combat veterans using their Vietnam Era Stress Inventory, discovered the most important stressor variable in PTSD symptomatology was Vietnam veterans' exposure to death and injury, including active killing and passive witnessing of others killed. Similarly, Wilson, Smith and Johnson (1985) revealed in their study of 74 Vietnam veterans that the greater and more severe the stressful life event, the greater and more severe the symptoms of PTSD. These results were substantiated in a study of Vietnam combat veterans by Solkoff, Gray, and Keill (1986) who reported the development of PTSD was related to intensity of combat and social

support upon coming home. In a similar study, Breslau and Davis (1987) indicated a distinctly marked association between war stressors and posttraumatic stress disorder in a sample of hospitalized psychiatric Vietnam veterans. In particular, they discovered participation in atrocities markedly increased the symptomatology found in PTSD.

A study by Mollica et al. (1987) on the impact of war trauma and torture in Southeast Asian refugees indicates that 26 of 52 psychiatric refugee patients were diagnosed as having PTSD. Of these, Cambodian patients were identified as the most highly traumatized group, having experienced the man-made horror of the Pol Pot regime.

Current studies examining PTSD in hospitalized patients frequently indicate there are large overlaps in diagnosis between PTSD and other DSM-III disorders. These overlapping disorders include depression, anxiety states, paranoia, and panic disorders (Behar, 1984; Bernstein, 1985; Scurfield, 1985; Sierles, Chen, & Messing, 1986). Mollica et al. (1987) noted in their study of Southeast Asian refugees that PTSD was the only diagnosis of only one patient. Out of 26 patients suffering from PTSD, 25 also suffered from another DSM-III diagnosis, primarily major affective disorder (Mollica et al., 1987).

Horowitz's (1985) study reported that 92 percent of patients with PTSD additionally suffered from depression. Similarly, Ettedgui and Bridges (1985) reported that depression is a common finding in patients with PTSD.

In an earlier study, Kinzie et al. (1984) suggested Cambodian concentration camp survivors diagnosed as having PTSD also were

diagnosed as having depression, atypical dissociative disorder, and mixed dissociative symptoms.

In summary, posttraumatic stress disorder requires four major criteria for diagnosis. Briefly, these criteria are a history of a traumatic event, re-experiencing the event, avoidance of stimuli associated with the event, and symptoms of increased arousal. In recent years, a plethora of studies on Vietnam veterans have given much empirical validation to the criteria that the disorder comprises. Additionally, it appears the disorder is longer lasting and of greater severity when the stressor is of man-made design.

The literature indicates that PTSD persists over long periods of time and often increases in severity. Studies have reported effects of the disorder can be mitigated if the individual has a strong social support system following the traumatic event. Similarly, the nature of the trauma and age of the individual at the time of the trauma are all variables that should be considered in the severity of the PTSD symptomatology. Interestingly, it appears the degree of psychological distress experienced in PTSD is directly related to the severity of the stressor and the nature of the traumatic event. The literature indicates the greater and more severe the stressful life event, consequently, the greater and more severe the symptoms of PTSD.

Evidence exists that validates the existence of PTSD in conjunction with other DSM-II disorders, particularly depression and anxiety states. It seems PTSD rarely exists as a solitary diagnosis but frequently overlaps with other disorders.

Research specifically examining posttraumatic stress disorder, the severity of trauma, and other related DSM-III diagnoses such as dissociation is lacking in the literature. In particular, no empirical study exists at this writing connecting PTSD, the incidence of dissociation, and the severity of trauma in Southeast Asian refugees. A more precise understanding of PTSD and dissociative disorders in this unique population seems essential in order to clarify the relationship between trauma, PTSD, and other DSM-III diagnoses, such as dissociation.

Summary and Conclusions from the Literature

Southeast Asian refugees have suffered extreme trauma in their pre- and postmigration experiences. The literature indicates that the Cambodian people have suffered the greatest trauma, having lived through a holocaust of major proportions during the years 1975-1979. It is not surprising the Cambodians are the most severely traumatized group, given the extreme forms of torture and traumatic experiences they have endured.

The literature reviewed indicated that the psychological sequelae of trauma on survivors seems to vary in proportion to the nature and degree of the traumatic experience. Documented evidence exists indicating severe psychological reactions do exist. A substantial body of literature seems to indicate that the emotional responses of victims and survivors of severe trauma possess striking similarities and long-lived symptomatology. Psychological responses in refugee populations were found to be comparable to those of other survivors of severe traumatic experiences.

In the limited number of studies on psychological disorders in Cambodian refugees resettled in America, PTSD was found to be prevalent. Similarly, a number of studies reviewed on psychosocial adaptation revealed that Indochinese refugees are in a situation that produces severe psychological problems. Research validates the difficulties these refugees have experienced after living through the Pol Pot regime and then adjusting to a drastically different culture. Specifically, the impediments of secondary migration and difficulties in occupational assimilation have been found to further complicate the psychological distress of Southeast Asian refugees. Additionally, underutilization of mental health services has been found to exacerbate the problems inherent in this population.

In general, the literature suggests Southeast Asian refugees in America represent a population at high risk for mental disorders. The complexities of American life compounded with their traumatic premigration experiences increases their vulnerability for developing significant emotional problems.

Dissociative disorders and dissociative phenomena have not been explored in the literature on the Southeast Asian refugee experience, although dissociative reactions are pervasive in the area of psychic trauma. The limited studies on dissociation and trauma suggest a link exists between extreme trauma and the development of dissociative disorders. However, the relationship between dissociation and trauma has had little empirical validation because of the unavailability of reliable and valid means of measuring dissociative phenomena. The

Dissociative Experiences Scale (DES) (Bernstein & Putnam, 1986) has recently filled this void.

The literature reviewed has indicated that many components of dissociative states exist in patients diagnosed as having PTSD. In fact, one of the most dramatic manifestations of PTSD is the reliving of the original experience, which is an altered state of consciousness indicative of dissociative states. However, at this writing, it appears no published literature exists empirically validating the nature or severity of dissociation in PTSD. Specifically, no literature further exists exploring this relationship in traumatized Southeast Asian refugee populations.

The research reviewed on PTSD indicates the disorder is of greater severity when the traumatic event is of man-made design. Additionally, research indicates PTSD persists over time and often increases in severity. It usually exists in conjunction with another DSM-III disorder, usually depression and anxiety. Recent research has focused on the severity and nature of the traumatic event and the corresponding degree of psychological distress experienced in PTSD. It appears the greater the trauma, the greater the symptoms of PTSD.

Mollica et al. (1987) have indicated a lack of research documenting the nature and degree of trauma suffered by refugees and the relationship between these traumatic experiences and the development and degree of psychological disorders. In fact, no research to date has examined the relationships between dissociation, degree of trauma, and the incidence of dissociation in PTSD. This study proposes to examine these relationships and provide empirical validation by documenting the

nature and degree of the trauma endured, the incidence of dissociation, PTSD, anxiety, and depression in the Cambodian survivors of the Pol Pot regime.

CHAPTER III

METHODOLOGY

The literature documents a lack of research in the degree of trauma suffered by refugees and the relationship existing between traumatic experiences and the development and degree of psychological disorders. Dissociative disorders have not been examined in any Southeast Asian refugee population although evidence indicates dissociative disorders are linked to psychic trauma. Similarly, posttraumatic stress disorder (PTSD) has been addressed in the literature in only two published articles on the Southeast Asian refugee population. In addition, Mollica et al. (1987) have revealed in limited studies on Southeast Asian refugees that PTSD was invariably associated with another disorder, often depression or anxiety. Accordingly, the research questions developed for this study will be addressed by testing the following hypotheses:

(1) A positive correlation exists between amount of trauma experienced by Khmer refugees and the development of dissociative disorders.

(2) A positive correlation exists between amount of trauma experienced by Khmer refugees and posttraumatic stress disorder symptomatology.

(3) A positive correlation exists between amount of trauma experienced by Khmer refugees and symptoms of depression.

(4) A positive correlation exists between amount of trauma experienced by Khmer refugees and symptoms of anxiety.

(5) A positive correlation exists between amount of trauma experienced by Khmer refugees and total HSCL-25 scores on anxiety and depression combined.

It was expected results would show statistically significant positive correlations between amount of trauma experienced by Khmer refugees and the five psychological disorders of dissociation, PTSD, anxiety, depression, and a combined diagnosis of anxiety and depression.

Subjects

Fifty adult Khmer refugees living in Greensboro, North Carolina, composed the sample. Since the purpose of the Pol Pot regime had been to destroy the intelligentsia, the Khmer refugees studied represented the rural, uneducated peasant culture. The 50 Khmer refugees sampled for this study by a table of random numbers indicated "rice farmer" as their occupation in Cambodia on biographical information received at the resettlement agency upon their arrival in America. Additionally, Mr. Oum, principal translator for this study, indicated that the provinces these Khmer came from in Cambodia were all rural, representing Cambodian peasant culture. Subjects were randomly sampled from among 500 Khmer refugees arriving in Greensboro, North Carolina, during 1983, 1984, and 1985 in a "cluster" resettlement approach employed by the federal government called "FASP" or Favorable Alternative Site Project. Names of Khmer were obtained from the volunteer agency that resettled these refugees in those three years.

Pilot Study

A pilot study was conducted in the summer and fall of 1988 with three Khmer subjects. The pilot study was conducted explicitly for the purpose of translating instruments and discerning culturally relevant variables the principal investigator should be familiar with before beginning actual research. In the pilot study, it was found the translation of the Dissociative Experiences Scale (DES) was poor. Subsequently, a second translation and back translation from Khmer to English were performed. Pertinent information derived from the pilot study was included and elucidated in translations and procedures described below. No statistical analyses were performed on data collected in the pilot study as it was necessary to have the DES translated again.

Instruments

The following instruments were used to measure independent and dependent variables in the study: the Dissociative Experiences Scale (DES), a PostTraumatic Stress Disorder (PTSD) symptom checklist, the Hopkins Symptom Checklist-25, Cambodian version (HSCL-25), and a trauma questionnaire.

Dissociative Experiences Scale (DES)

To quantify Khmer refugees' dissociative experiences, the Dissociative Experiences Scale (Bernstein & Putnam, 1986) was used (see Appendix C). The DES is a dissociative screening device that permits clinicians to see where an individual lies on a continuum. Normal subjects have infrequent and fewer dissociative experiences than individuals having a clinical disorder with a major dissociative

component. The DES scale differentiates between those subjects with and those without a clinical diagnosis of a dissociative disorder (Bernstein & Putnam, 1986). It permits quantification of reported dissociative experiences, and the DES score reflects an index of the number of varying types of dissociative experiences and the frequency of those experiences.

The DES contains 28 questions pertaining to the frequency of experiences described. Subjects are asked to answer the 28 questions by marking a 100-mm line below each question to show the degree to which they had the experience described in each question.

The DES has both good test-retest reliability and good split-half reliability. The DES score test-retest reliability is 0.84 ($p < .0001$, $N = 26$) (Bernstein & Putnam, 1986). The reliability coefficients of item scores ranged from .19 to .75 with 25 of the 28 items having coefficients reaching a significance level of $p < .05$ and 16 of the items reaching a level of $p < .001$ (Bernstein & Putnam, 1986).

Validity measures for the DES show that it has good construct validity and good criterion-related validity. The scale was validated on 156 subjects including normal adults and a variety of psychiatric groups including PTSD ($N = 10$) and MPD ($N = 20$) (Bernstein & Putnam, 1986). A Spearman rank-order correlation between DES scores and age was -.19 ($p < .01$, $N = 183$), and the same statistic between DES scores and socioeconomic status was .15 ($p < .08$, $N = 143$) (Bernstein & Putnam, 1986).

Partial construct validity of the scale was calculated for all subjects by Spearman rank-order correlations between each item score and item-corrected DES scores. All these correlations reached a level of

$p < .0001$ (Bernstein & Putnam, 1986). A Kendall coefficient of concordance yielded .70 ($p < .0001$) showing high agreement among items (Bernstein & Putnam, 1986). A Kruskal-Wallis test to compare DES scores across different groups for criterion-referenced concurrent validity yielded a significance at $p < .0001$ (Bernstein & Putnam, 1986).

The DES has been successfully translated and used in other countries. Dr. Bernstein-Carlson (personal communication, April 15, 1989) indicated the DES has been translated into French and Danish and has been used successfully in discerning dissociative experiences of individuals in these countries.

Posttraumatic Stress Disorder Symptom Checklist (PTSD)

Khmer respondents completed a short PTSD symptom checklist (see Appendix D). The items are forced-choice questions (i.e., Yes or No), asking whether the respondent had the listed symptoms. The checklist contains 14 symptoms comprised by the major diagnostic criteria for 309.89, posttraumatic stress disorder in the DSM-III-R. Four symptoms under the DSM-III-R criterion "C" section were deleted because the investigator felt they were not pertinent to Khmer refugees, given their relocation situation in a new culture or because they were especially difficult for the translator. Therefore, under criterion "C", numbers 4, 5, 6 and 7 were omitted. These criteria correspond to having a diminished interest in significant activities; feeling detached or estranged from others; a restricted range of affect and a sense of a foreshortened future, as in not expecting marriage, children, or a long life (DSM-III-R, 1987).

A test-restest reliability coefficient of .85 was determined on the PTSD symptom checklist. This coefficient was based on the results of repeated testing with 20 randomly chosen subjects. The time span between the test and retest was five weeks.

Hopkins Symptom Checklist-25, Cambodian Version (HSCL-25)

To detect the psychological problems of anxiety and depression in Khmer refugees, the Hopkins Symptom Checklist-25, Cambodian version (Mollica et al., 1985) was used (see Appendix E). The HSCL-25 is a screening instrument that allows clinicians to recognize symptoms that are universally associated with anxiety and depression (Mollica et al., 1987). Khmer subjects with scores of 1.75 or higher out of a possible maximum of 4.00 on the depression score, anxiety score, or total score are considered symptomatic and as having significant emotional distress. The HSCL-25 contains four response categories ranging from "not at all" to "extremely." This structure is a safeguard against simple "yes" and "no" answers and is helpful in determining the severity of a psychiatric disorder and in documenting change in a client's condition (Mollica et al., 1987).

The HSCL-25, Cambodian version, contains 10 items from the HSCL-58 anxiety cluster and 13 items from the depression cluster. Two additional somatic symptoms are included in the depression cluster. Subjects were asked to respond to the 25 items by indicating which of four response categories ("not at all," "a little," "quite a bit,", "extremely") best represented their experience with each item.

The HSCL-25 has high test-retest reliability coefficients for the three Indochinese versions combined. These coefficients were .89 for

the total, .84 for anxiety and .82 for depression. Interrater reliability for each of the Lao, Vietnamese, and Cambodian groups on total scores, anxiety, and depression was greater than .98 (Mollica et al., 1987).

Sensitivity and specificity of the HSCL-25 were determined through comparing the HSCL-25 scores with the DSM-III diagnosis given by a psychiatrist blind to the HSCL-25 results (Mollica et al., 1987). The HSCL-25 was validated on 63 new admissions to the Indochinese Psychiatry Clinic over an 18 month period who were not receiving medication or psychiatric treatment at the time of admission. Scores were determined for the three categories of depression, anxiety and a composite. Scores greater than 1.75 in any category signified emotional distress (Mollica et al., 1987). Validity of the HSCL-25 through sensitivity and specificity was high, yielding .88 and .73, respectively. Additionally, the sensitivity and specificity of the HSCL-25 for identifying any major DSM-III Axis I disorder was high, yielding a sensitivity coefficient of .93 and a specificity coefficient of .76 (Mollica et al., 1985).

The HSCL-25 is readily accepted by Southeast Asian refugee clients because it resembles a medical test (Mollica et al., 1985). Additionally, it is easily understood by Indochinese paraprofessionals and allows them to gain information about psychological symptoms from their subjects that ordinarily are restricted to medical professionals.

The HSCL-25 was found by clinicians working at the Indochinese Psychiatry Clinic to be of particular help in evaluating victims of trauma, especially Cambodian clients who had experienced multiple traumas under the Pol Pot regime (Mollica et al., 1987). The HSCL-25 is

a short, nonprovocative instrument that puts words around the client's feelings; it is not emotionally intrusive, yet it achieves specificity of emotional distress important for diagnosis and treatment (Mollica et al., 1987.)

Trauma Questionnaire

Khmer subjects completed a one-page questionnaire (see Appendix F). This checklist was obtained from Dr. Kenneth Meinhardt, an adjunct psychiatry professor at Stanford University and director of mental health in Santa Clara County. The same checklist was used in a survey conducted in 1981 by Dr. Meinhardt called the Asian Health Assessment Project. The checklist includes a set of 21 questions that are pertinent to the unique nature of the Khmer refugees' traumatic life experience. The items in this checklist are forced-choice questions (Yes or No). Question 22 (Did you experience a loss of personal property?) was deleted from the checklist after conducting the pilot study. The researcher felt it served no useful purpose and there was no variability in response to this item.

Weights were assigned to the 21 questions in the trauma questionnaire. Ten Khmer refugees who had lived through the Pol Pot experience themselves judged the list of 21 traumatic events. Each judge assigned a number from 0 to 100 to each traumatic event, with zero representing no amount of trauma and 100 representing the most severe trauma. An average score was derived for each event by summing and dividing by ten. Each average was then turned into a proportion by dividing by 100.

A similar method was used by Krupinski and Burrows (1986) in their longitudinal study on psychiatric disorder in Southeast Asian children, adolescents, and young adults. They devised a premigration stress index that assessed the severity of different premigration events. Ten Indochinese interviewers who had lived through these premigration events were judges on a list of 80 of these traumatic events. A "relative stress score" was given for each event. Krupinski and Burrows (1986) then weighted each event, which could then be used to summarize total weighted stress scores. They found Cambodian refugees had suffered mostly in their own country (premigration stress index), and one out of three Cambodians had lost members of their immediate family (Krupinski & Burrows, 1986). Additionally, they found some kinds of traumatic experiences to be more potent than others.

In addition to a total weighted trauma score for each subject, a "simple" total trauma score was calculated by merely adding the number of "yes" out of a total of 21 trauma items. This yielded a score ranging from 0 through 21.

Translation of Instruments

Instruments were translated into Khmer by Ms. Nary Keo from June 1988 to October 1988. Mr. Sokhom Oum back-translated from Khmer to English. Mr. Oum found many discrepancies in the translation of the DES and indicated it should be retranslated. Mr. Oum translated the instrument from English into Khmer. Ms. Nan Khoun then back-translated from Khmer to English. Mr. Oum, Ms. Khoun, and the investigator spent a great deal of time discussing words, concepts, and nuances so that the intended Khmer sample would thoroughly understand the instruments to be used in the study.

Translator from English to Khmer

Ms. Nary Keo initially translated the DES, PTSD symptom checklist, and instructions from English to Khmer. She spent 39 hours in actual translation time.

Ms. Keo was born in Battambang, Cambodia. She received a high school diploma in Cambodia and attended private school in Battambang. She was an elementary school teacher in Tanakeo before the Pol Pot regime. She is fluent in Vietnamese, French, Thai, Cambodian, Laotian, Chinese and English.

Translator for Back-Translation from Khmer to English

The back translation from Khmer to English was performed by Mr. Sokhom Oum, who was born in Cambodia in Kompong Speu. He holds a college degree from Phnom Penh and was a French teacher for high school students in Kompong School before the Pol Pot regime. Mr. Oum is fluent in French, Khmer, Thai, Laotian, and English. In Sakeo refugee camp, he was chosen by UNHCR (United Nations High Commissioner for Refugees) officials to oversee 16 schools, 200 teachers, and 1,800 students. He worked as a translator and director of the Khmer Secondary Resettlement Project through Lutheran Family Services until 1988.

Additional Translator and Judge of Word Precision in Instruments

Ms. Nan Khoun, wife of Sokhom Oum, was a third judge in the final translation of the instruments into the Khmer language. Ms. Khoun is also from Kompong Speu and has a high school degree from Cambodia. She taught first, second, and third graders in Cambodia before Pol Pot. For five years she worked for Lutheran Family Services in Greensboro as a translator and is currently employed at the Guilford County Health department as a translator for medical appointments.

Confidentiality

Dr. Richard Mollica of the Indochina Psychiatry Clinic at Brighton Marine Hospital in Brighton, Maine, the foremost current researcher in this field, emphasized the importance of the translator's being trusted by the subjects to be tested. He said confidentiality was a major issue with the Khmer.

Mr. Oum, the principal translator, was cautioned at length that the research must remain confidential. He understood and agreed. Mr. Oum signed a confidentiality paper attesting to his full agreement in keeping all aspects of the study confidential (see Appendix G). Mr. Oum felt strongly about wanting to help the Cambodian people and was keenly interested in the study. Mr. Oum was indeed confidential with the research and was the best available Khmer translator. The Khmer people in the area respect him for his tenacity and his love for his children, an indication in Cambodia of a person's goodness. He attends the local Buddhist temple and is known for his intelligence in the Khmer community.

Procedures

To gain entry into the field, the principal investigator had the translator, Mr. Oum, call those Khmer refugees resettled in Greensboro, North Carolina, chosen for the study through a random sampling procedure. Individual appointments were made with each household where data were to be collected.

Sampling

Cambodian refugees living in Greensboro, North Carolina, were the target population for the proposed research. These refugees were

resettled in 1983, 1984, and 1985 in Greensboro through the federal program FASP of the Office of Refugee Resettlement (ORR). The volunteer agency (VOLAG) in Greensboro chosen for this resettlement cluster site was Lutheran Family Services. Approximately 500 Khmer refugees came from camps on the Thai-Cambodian border to Greensboro during 1983, 1984 and 1985. Random sampling of 50 Khmer refugees was used to determine the sample in the proposed study. Names of refugees resettled during this time were obtained from Lutheran Family Services, the agency that resettled these Khmer during 1983, 1984, and 1985. A table of random numbers was used to identify the 50 subjects in this study from the Khmer population resettled in Greensboro, North Carolina.

All 50 subjects chosen for this study participated with the exception of five subjects who had moved out of the state. Again, the table of random numbers was used to identify five more subjects. There were no refusals to participate in this study.

Data Collection

After the sample was selected, the translator made individual appointments with subjects chosen for the study. Mr. Oum and the investigator, an American woman, had helpted to resettle these Khmer refugees in Greensboro in 1983, 1984, and 1985; therefore, it was felt the subjects would trust the translator and American investigator as they already knew both of them personally. The translator and investigator went to Khmer households at appointed times to interview subjects. The pilot study conducted in the summer and fall of 1988 indicated that approximately one and one half hours was needed per subject.

Previous Pilot Study and Cross-Cultural Sensitivities

A pilot study completed in the summer of 1985 for an anthropology class on the mental health needs of the Khmer people gave the principal investigator sensitivity and insight into the subtle nuances of cross-cultural research with the Khmer for the proposed project. Again, the importance of the confidential aspects of collecting data emerged. Also, it was important for the investigator to be relaxed, not in a hurry, and to show respect for the culture by accepting something to eat and drink. It was also a further show of respect and politeness to remove one's shoes before entering the home of the Khmer. Asking about the children and elderly relatives were further signs of cultural sensitivity. The principal investigator speaks limited Khmer but knew major phrases such as "How are you today?" and "Thank you," which delighted subjects and showed a further interest in the culture. Bowing of the head and pressing one's palms together at chest level was a traditional greeting the investigator felt was particularly important to use when in the presence of those Khmer older than oneself and was a further show of respect for and knowledge of the culture. Additionally, if gifts were presented to the investigator it was important they be accepted. Not to do so is considered a rejection of the presenter.

In the previous study conducted during the summer of 1985, the investigator had also found unavoidable distractions. Khmer households are larger than American households because extended family members quite naturally live in the home, including even god- or "blood-" brothers and sisters. There was more commotion present than in American homes, and children were breast-fed, fondled, and chided while the

investigator and translator conducted their research. It was best for the investigator to approach her research knowing this was a "given" in the Khmer culture and to accept what she might feel were unnecessary distractions.

Research Interviewers Manual

A research interviewer's manual was obtained from Mr. Gary Andresen at San Diego State University, who was principal investigator in a research project recently completed on the Montagnard people (see Appendix A). Salient parts of the manual were read by Mr. Sokhom Oum, the principal translator, before conducting the pilot research with the principal investigator. Parts of the manual used in the study were "The Ethics of Research Interviewing" and "Interviewing Principles and Procedures."

Instructions

Instructions were written out to be read to the Khmer subjects. Instructions were written in English, translated into Khmer, and back translated into English (see Appendix B). These instructions emphasized the confidential nature of the data collected, the importance of the research, the gratitude of the researcher for their participation, and the subject's right not to participate. The instruction sheet reiterated the nature of the research, that being to enable Americans to understand better the experiences of the Khmer people. The instructions were simply written and assured subjects their answers to questions were judged neither as right or wrong. The principal investigator and translator felt these instructions were an important beginning to the actual presentation of the instruments used, given the subjects'

traumatic past histories, and their cultural propensity to often acquiesce despite their true feelings. Mr. Oum, Ms. Keo, and Ms. Khoun indicated they believe the instructions were simple, appropriate and comprehensive for intended study.

Procedure

The actual time necessary to administer individually the DES, PTSD symptom checklist, HSCL-25, and trauma questionnaire was approximately one and one half hours per person. The translator and investigator believed this amount of time was necessary in order to be relaxed, adequately thank the respondents, and ask perfunctory but essential questions of interest.

The order of the presentation of instruments in the study was such that the first three instruments (DES, PTSD, and HSCL-25) were randomly varied with the trauma questionnaire always being the last instrument because it could elicit provocative responses. The concept of the 100 millimeter line used in the DES was explained more than once. The investigator and translator felt confident the subjects understood before proceeding.

It was found that respondents in the pilot study had difficulty holding a pencil and using it properly. The investigator and translator assisted respondents on the use of a pencil when necessary.

Questions were read to subjects twice. It was found through the pilot study that the translator should read the question, pause, then re-read the question slowly. The investigator assisted subjects in answering the correct item.

Respondents were questioned individually. No respondents had trouble understanding any questions. However, respondents were very deliberate and gave much thought before making decisions as to how they wanted to respond. In the pilot study, no respondent felt questions were upsetting.

Data Analysis

The data were analyzed to determine whether a relationship existed between the independent variable of trauma and the dependent variables of scores on the DES, PTSD symptom checklist, and HSCL-25. The Pearson product moment correlation procedure was used to provide coefficients to examine the relationships between the independent variable of trauma and all dependent variables in the study. In addition, the Pearson Product Moment correlation procedure was used to provide coefficients between trauma (weighted) and trauma (total). Pearson coefficients were also determined among all dependent variables. An alpha level was set at .05 to determine the significance of the Pearson coefficients. However, the actual probabilities were reported in Chapter IV.

CHAPTER IV

RESULTS

This chapter presents a description of subjects who participated in the study. Included are means and standard deviations for independent and dependent variables. Findings of the statistical analyses used to test the five hypotheses in Chapter III are discussed. Finally, data were further examined to learn what other factors and hypotheses could be generated by this study.

Subjects

A total of 50 Khmer refugees over the age of 21 who were resettled in Greensboro, North Carolina in 1983, 1984, or 1985 were randomly selected from among 500 Khmer refugees living in Greensboro who were resettled during these years. The exact number of females and males of this population was not able to be obtained. The sample size included 24 males and 26 females. The mean age of subjects was 42.00 with a standard deviation of 10.09. The youngest person to respond in the study was 21, and the oldest was 65. The mean age for subjects being forced to leave their home in Cambodia was 32.04 with a standard deviation of 10.09. The mean age of when subjects arrived in America was 36.60 with a standard deviation of 10.01.

Independent Variables

For the entire sample (N = 50), the mean score on the trauma scale was 7.53 (SD = 1.53). The maximum a subject could score was 10.47. In this study, the minimum scored for trauma was 4.85, and the maximum

scored was 10.47. Means and standard deviations for the total sample and for genders are listed in Table 1.

Table 1

Descriptive Results

Variable	Total Sample (N = 50)		Total Male Sample (N = 24)		Total Female Sample (N = 26)	
	MEAN	SD	MEAN	SD	MEAN	SD
TRAUMA	7.53	1.53	8.072	1.54	7.029	1.37
DES	37.19	16.17	38.82	18.08	35.68	14.38
PTSD	11.68	2.77	10.92	3.19	12.38	2.15
DEP	2.29	.67	2.23	.73	2.34	.63
ANX	2.39	.79	2.32	.74	2.47	.84
HOP	2.36	.72	2.32	.77	2.39	.68

Dependent Variables

Dissociative Experiences Scale

The mean for this sample for DES was 37.19 (SD = 16.17). The maximum a person could score on the DES was 100. The minimum score in this sample was 9.46, and the maximum was 88.75.

Posttraumatic Stress Disorder Checklist

The mean for the entire sample for PTSD was 11.68 (SD = 2.77). The maximum a person could score on the PTSD symptom checklist was 14.00. In this sample, the minimum was 4.00 and the maximum 14.00.

Depression

The mean for the sample on depression was 2.29 (SD = .67). The depression measure on the HSCL-25 indicates symptomatology for an individual with a score of or greater than 1.75, with the maximum score being 4.00. The minimum score for depression was 1.13, and the maximum was 4.00.

Anxiety

The mean for the sample on anxiety was 2.39 (SD = .79). The anxiety measure on the HSCL-25 indicates a person is symptomatic with a score of or greater than 1.75, with the maximum score being 4.00. The minimum score for anxiety was 1.00 with a maximum of 4.00.

Hopkins Symptom Checklist-25, Combined Scores (Cambodian Version)

The mean for the sample on the HSCL-25 was 2.36 (SD = .72). The overall HSCL-25 score indicates symptomatology for an individual with a score of or greater than 1.75, with the maximum score being 4.00. The overall minimum on the HSCL-25 was 1.36 with an overall maximum of 3.96.

Hypotheses

The first null hypothesis was that there was no relationship between the independent variable of amount of trauma and the dependent variable of dissociation as measured by the DES. The null hypothesis was rejected in favor of the alternative. The Pearson Product Moment correlation coefficient between amount of trauma and scores on the DES was $r = .341$, $p < .02$. A statistically significant relationship exists between amount of trauma and scores on the DES.

The second null hypothesis of the study was that there was no relationship between the independent variable of amount of trauma and

the dependent variable of posttraumatic stress disorder as measured by the PTSD symptom checklist. The null hypothesis of no correlation was rejected in favor of the alternative. The Pearson Product Moment correlation coefficient between amount of trauma and scores on the PTSD symptom checklist was $\underline{r} = .398$, $\underline{p} < .005$. This indicates a statistically significant relationship between amount of trauma and scores on the PTSD symptom checklist.

The third null hypothesis of the study was that there was no relationship between the independent variable of amount of trauma and the dependent variable of depression as measured by scores on the depression component on the HSCL-25 (Cambodian version). The null hypothesis of no correlation was rejected in favor of the alternative. The Pearson Product Moment correlation coefficient between trauma and depression was $\underline{r} = .472$, $\underline{p} < .001$. This means that, based on the sample in this study, there is a statistically significant relationship between amount of trauma and scores on the HSCL-25 for depression.

The fourth null hypothesis was that there was no relationship between the independent variable of amount of trauma and the dependent variable of anxiety as measured by scores on the anxiety component on the HSCL-25 (Cambodian version). The null hypothesis was rejected in favor of the alternative. The Pearson Product Moment correlation coefficient between amount of trauma and scores on the HSCL-25 for anxiety was $\underline{r} = .320$, $\underline{p} < .03$. Again, a statistically significant relationship exists between amount of trauma and scores on the HSCL-25 for anxiety.

The fifth null hypothesis of the study was that there was no

relationship between the independent variable of amount of trauma and the dependent variable of the composite of anxiety and depression as measured by the combined depression and anxiety components on the HSCL-25 (Cambodian version). The null hypothesis of no correlation was rejected in favor of the alternative. The Pearson Product Moment correlation coefficient between amount of trauma and total HSCL-25 scores was $r = .431$, $p < .002$. This indicates a statistically significant relationship between amount of trauma and total HSCL-25 scores.

Table 2 provides the Pearson Product Moment correlation coefficients between the independent variables of amount of trauma as determined by weighted scores and the dependent variables of scores on the DES, PTSD symptom checklist, anxiety, depression and total HSCL-25 (Cambodian version) scores.

Table 2

Pearson Product Moment Correlations for the Independent Variable (Weighted) Correlated with the Dependent Variables

Variable	Trauma	
	r	
DES	.341	($p < .02$)
PTSD	.398	($p < .005$)
DEPRESSION	.472	($p < .001$)
ANXIETY	.320	($p < .03$)
Total HSCL-25	.431	($p < .002$)

Table 3 provides the Pearson Product Moment Correlation coefficients between the independent variables of amount of trauma as determined by total additive scores and the dependent variables of scores on the DES, PTSD syptom checklist, anxiety, depression, and total HSCL-25 (Camboidan version) scores. Based on the sample in this study, a statistically significant relationship exists between a total additive score of trauma and scores on all of the dependent variables. The correlations between total trauma scores and the DES, PTSD symptom checklist, anxiety, depression, and total HSCL-25 scores were r = .373 (p < .007), r = .394 (p < .004), r = .483 (p < .0004), r = .333 (p < .01), r = .445 (p < .001), respectively. These correlations are very close to those found between the weighted trauma scores with the dependent variables.

Table 3

Pearson Product Moment Correlations for the Independent Variable (Total) Correlated with the Dependent Variables

Variable	Trauma
	r
DES	.373 (p < .007)
PTSD	.394 (p < .004)
DEPRESSION	.483 (p < .0004)
ANXIETY	.333 (p < .01)
Total HSCL-25	.445 (p < .001)

Subsequent Findings

Individual Trauma Items and Dependent Variables

Pearson Product Moment correlation coefficients were determined between individual trauma items and the dependent variables. Items that correlated significantly with the dependent variables are presented in Table 4. A list of the individual trauma items is detailed in Table 5. It should be noted that Items 1 and 2 were answered in the affirmative by all subjects, thus resulting in a correlation of zero. Since there was no variability in response to these items, there was no correlation. Similarly, Items 19, 20, and 21 were answered in the negative by the majority of subjects, again resulting in little variability and, therefore, low correlations.

Item 9 asks if the subject experienced a change in residence for political reasons. This item correlated significantly with the dependent variables of anxiety (r = .381, $p < .007$), depression (r = .352, $p < .02$), and a total HSCL-25 score (r = .390, $p < .005$).

Interestingly, items 11, 12, 13, and 14 are clustered in that they all relate to incidents happening to a close family member. Item 11 asks if the subject had a close family member who was sent to prison for political reasons. Item 11 correlated significantly with scores on depression (r = .390, $p < .01$) and the total HSCL-25 score (r = .311, $p < .03$). Item 12 asks if the subject experienced a close family member being personally assaulted (including rape). Item 12 indicated a moderate positive correlation with anxiety (r = .370, $p < .009$), depression (r = .355, $p < .02$), and the total HSCL-25 score (r = .390, $p < .006$). Similarly, item 13 asks if the subject experienced a close

Table 4

Pearson Product Moment Correlation Coefficients for

Individual Items that Correlated Positively with the Dependent Variables

Variable/Item	9	11	12	13	14	15	16	17	18
Depression	.352($p<.01$)	.390($p<.01$)	.355($p<.02$)	.455($p<.001$)	.328($p<.03$)	.335($p<.02$)	.368($p<.009$)		.346($p<.02$)
Anxiety	.38($p<.007$)		.370($p<.009$)				.333($p<.02$)		.366($p<.01$)
Total HSCL-25	.390($p<.01$	.311($p<.03$)	.390($p<.006$)	.406($p<004$)	.297($p<.04$)	.303($p<.04$)	.378($p<.007$)		.381($p<.007$)
PTSD							.388($p<.02$)	.593($p<.001$)	.374($p<.008$)
DES					.241($p<.05$)				

Table 5

List of Individual Trauma Items

Since April 17, 1975, did you experience:

1. A serious food shortage?
2. The feeling that your life was in danger?
3. Relatives or friends forced to move in with you?
4. The feeling that your relatives or friends were in danger?
5. Relatives who disappeared?
6. Friends who disappeared?
7. Reunion with family members after having lost contact with them?
8. Change in residence for economic reasons?
9. Change in residence for political reasons?
10. Change in residence because of proximity to battle areas?
11. A close family member who was sent to prison for political reasons?
12. A close family member who was personally assaulted (including rape)?
13. A close family member who was injured when getting out of the country?
14. A close family member who was killed when getting out of the country?
15. A friend who was sent to prison for political reasons?
16. A friend who was personally assaulted (including rape)?
17. A friend who was injured when getting out of the country?
18. A friend who was killed when getting out of the country?
19. Yourself being sent to prison for political reasons?
20. Yourself being personally assaulted (including rape)?
21. Yourself being injured when getting out of the country?

family member being injured when getting out of the country. Item 13 correlated significantly with scores on depression (r = .455, $p < .001$) and the HSCL-25 (r = .406, $p < .004$). Item 14 asks if the subject experienced a close family member being killed when getting out of the country. Item 14 correlated significantly with scores on the DES (r = .241, $p < .05$), depression (r = .328, $p < .03$), and HSCL-25 (r = .297, $p < .04$). It appears items 11, 12, 13, and 14 relating to the subjects' experiences with close family members all correlated significantly with depression and HSCL-25 scores.

Items 15, 16, 17, and 18 are clustered in that they correspond to incidences relating to a friend. Item 15 asks if the subject had a friend who was sent to prison for political reasons. Item 15 correlated significantly with depression (r = .335, $p < .02$) and total HSCL-25 score (r = .303, $p < .04$). Item 16 asks if the subject experienced having a friend who was personally assaulted (including rape). Item 16 correlated significantly with PTSD (r = .338, $p < .02$), anxiety (r = .333, $p < .02$), depression (r = .368, $p < .009$), and the HSCL-25 (r = .378, $p < .007$). Item 17 asks if the subject experienced a friend being injured when getting out of the country. Item 17 correlated significantly with PTSD (r = .593, $p < .001$). Item 18 asks if the subject experienced a friend being killed when getting out of the country. Item 18 correlated significantly with PTSD (r = .374, $p < .008$), anxiety (r = .366, $p < .01$), depression (r = .346, $p < .02$), and the HSCL-25 (r = .381, $p < .007$). Items 15, 16, 17, and 18 all correlate significantly with depression and the HSCL-25.

Overall, it appears items 9, 11, 12, 13, 14, 15, 16, and 18 indicate moderate positive correlations on both depression and the HSCL-25. In particular, items 16, 17, and 18 correlate significantly with PTSD symptomatology. Item 14 appeared to be the only item with a significant correlation to scores on the DES (r = .241, p < .05).

Correlation between Trauma and Trauma Total

A Pearson Product Moment correlation coefficient of .998, p < .001 was determined between the trauma weighted scale and the trauma total score. The trauma weighted scale was described in Chapter III, wherein ten independent Khmer judges "weighted" the 21 trauma items in terms of the potency of varying traumatic experiences. The trauma total score simply reflects the number of yeses to which the subject has responded. This means that based on this sample of the study, there is a statistically significant relationship between the trauma weighted score and the trauma total score. The correlation is very high, indicating in this study that trauma is more additive in nature. This high correlation could lead to further validation studies indicating that adding the total number of traumas is sufficient rather than weighting each individual trauma item and adding for a total weighted trauma score.

Correlations Among Dependent Variables

Pearson Product Moment correlation coefficients were determined among all dependent variables. Mollica et al. (1988) indicated PTSD rarely existed as a solitary diagnosis in Khmer refugees but co-existed with other DSM-III-R disorders, usually depression. Findings in this study support this contention. The correlation between PTSD and

depression was r = .591, p <.001, indicating a statistically significant correlation. Other correlations between PTSD and DES, PTSD and anxiety, PTSD and total HSCL-25 scores were r = .377 (p < .008), r = .474 (p <.001), r = .569 (p < .001), respectively. Again, these findings give support to the contention that PTSD usually exists in conjunction with other DSM-III disorders.

The correlations between the DES and anxiety, depression, and total HSCL-25 score also indicated moderately high positive correlations between dissociative disorders, and the existence of other DSM-III disorders. These correlations were r = .526 (p<.001), r = .584 (p < .001), and r = .577 (p < .001), respectively. The correlation between anxiety and depression was found to be r = .834 (p<.001).

Table 6 illustrates the Pearson Product Moment correlations between all of the dependent variables.

Table 6

Pearson Product Moment Correlations Between Scores on all Dependent Variables

Variable	PTSD	DES	Anxiety	Depression
DES	.377 (p < .008)			
Anxiety	.474 (p < .001)	.526 (p < .001)		
Depression	.591 (p <.001)	.584 (p < .001)	.834 (p <.001)	
HSCL-25	.569 (p <.001)	.577 (p < .001)		

SUMMARY

All five null hypotheses were rejected in favor of the alternative in this study. Data analyses showed statistically significant relationships between trauma and DES scores, trauma and PTSD, trauma and depression, trauma and anxiety, and finally, trauma and total HSCL-25 scores. Subsequent findings indicated that clusters of individual trauma items showed moderate positive statistical significance to dependent variables. Specifically, items 9, 11, 12, 13, 14, 15, 16 and 18 indicated statistical significance on both depression and total HSCL-25 scores. Items 16, 17 and 18, corresponding to subjects' having experiences with incidences relating to a friend, all correlated significantly with PTSD symptomatology. Item 14, having to do with a close family member who was killed when getting out of the country was the only item to correlate significantly with scores on the DES.

Other subsequent findings indicated a high correlation ($r = .998$, $p < .001$) between the weighted trauma score and a simple additive trauma total (number of yeses answered by subjects). Similarly, correlations between all dependent variables indicated statistically significant correlations. This validates studies presented in Chapter II, giving support to the contention that PTSD often exists in conjunction with other DSM-III disorders.

CHAPTER V

DISCUSSION

The purpose of this study was to examine the relationships between trauma and dissociation, PTSD, anxiety, depression, and a composite of anxiety with depression. Individual items in the trauma checklist were also correlated with all dependent variables to determine significant positive correlations. Also investigated were subsequent relationships between a total weighted trauma score and a total additive trauma score. Additionally, relationships between dissociation, PTSD, anxiety, depression, and a composite of anxiety and depression were examined.

Trauma and Dissociation

The results of the Pearson Product moment correlation between the independent variable of amount of trauma and the dependent variable of dissociation as measured by scores on the DES resulted in a statistically significant moderately positive correlation as was expected. This finding supports previous research suggesting a link exists between the severity of psychic trauma and the subsequent development of dissociative disorders (Putnam, 1985). The finding not only supports the limited empirical validation on the relationship between trauma and dissociation (Spiegel, 1986) but is the first available research to report on the relationship between the amount of trauma in a Southeast Asian adult refugee population and dissociative disorders.

Trauma and PTSD

As expected, the results of the Pearson Product moment correlation between the independent variable of amount of trauma and the dependent variable of posttraumatic stress disorder as measured by scores on the PTSD symptom checklist, resulted in a moderately positive correlation. This supports a nonpsychiatric population having similar psychological disorders as reported in the earlier findings in the two published studies on the incidence of PTSD among Southeast Asian refugee psychiatric populations (Kinzie et al., 1984; Mollica et al., 1985).

Trauma and Depression

The highest Pearson Product moment correlation was between the independent variable of trauma and the dependent variable of depression as measured by scores on the HSCL-25. This finding is not surprising, given the research on the Southeast Asian refugee experience and the incidence of depression. Mollica et al (1987) noted that depression existed in their sample of Indochinese refugee patients, usually in conjunction with symptoms of PTSD. Similarly, depression was found to be prevalent in earlier studies of Southeast Asian refugees (Cohon, 1979; Kinzie & Manson, 1983; Rumbaut, 1985; Westermeyer et al., 1983).

Trauma and Anxiety

Results of the Pearson Product moment correlation between the independent variable of amount of trauma and the dependent variable of anxiety measured by scores on the HSCL-25 were moderately positively correlated. In an earlier study, Mollica et al. (1987) found anxiety was particularly prevalent in Cambodian refugees, a group they discovered to be the most severely traumatized of all Southeast Asian

refugee ethnic groups. Thus, these findings support the only published research available on trauma and anxiety in Cambodian refugees.

Trauma and Hopkins Symptom Checklist-25 (Composite)

As expected, the results of the Pearson Product moment correlation between the independent variable of amount of trauma and the dependent variable of a composite of anxiety and depression as measured by scores on the HSCL-25 was positively correlated. The only available published research by Mollica et al. (1985), indicated that Cambodian psychiatric patients, having experienced a high level of trauma, scored as having a psychiatric disorder on the total HSCL-25. These findings lend support to the fact that a nonpsychiatric population has similar incidences of psychological disorders.

Subsequent Findings

Individual Trauma Items and Dependent Variables

Of the 21 individual trauma items that were correlated with the dependent variables, only nine of these items revealed significant positive correlations. Items 1, 2, 19, 20, and 21 resulted in zero correlations or extremely low correlations since there was no variability in response to these items. These items were not amenable to being examined statistically, but it is important that all of the sample in this study either experienced or did not experience these individual trauma items. All subjects sampled in this study experienced items 1 and 2, those being a serious food shortage or feeling their life was in danger. Only three or four subjects experienced any of items 19, 20, or 21, those being the subject being sent to prison, personally assaulted, or injured when leaving the country. These results are

similar to previous findings (Krupinski & Burrows, 1986) that indicatd some traumatic events were universally experienced by their sample while other events were rarely experienced. Items 9, 11, 12, 13, 14, 15, 16, 17, and 18 resulted in positive correlations. Item 9 asks if the subject experienced a change in residence for political reasons. This item correlated significantly with the dependent variables of anxiety, depression, and total HSC1-25 scores.

The remaining items that positively correlated appeared in groups, with similar themes of items corresponding to positive correlations with the dependent variables. For instance, items 11, 12, 13, and 14 are grouped because they reflect experiences that happened to a close family member. All of these four items correlated significantly with the dependent variables of depression and total HSCL-25 scores. These results parallel previous findings (Alley, 1982; Brown, 1982; Bruno, 1984; Duncan & Kang, 1984; Krupinski & Burrows, 1986; Robinson, 1980) that emotional difficulties of Indochinese refugees are often the result of incidents occurring to significant family members.

Similarly, items 15, 16, 17, and 18 emerged in a group, with the theme of incidences relating to a friend corresponding to positive correlations on some of the dependent variables. Again, these four items correlated significantly with depression and total HSCL-25 scores. Of particular interest were items 16, 17, and 18. These three items were the only trauma items to correlate significantly with PTSD. These items refer to subjects having experienced a friend being personally assaulted (item 16), injured when getting out of the country (item 17) or killed when getting out of the country (item 18). These

findings substantiate earlier studies on PTSD and the experiences of Vietnam veterans. These studies (Laufer, Brett and Gallops, 1985; Matessek, 1975; Solkoff, Gray and Keill, 1986; Wilson & Krauss, 1985) demonstrated that witnessing of abusive violence, exposure to death and injury including passive witnessing of friends killed and intensity of combat increased PTSD symptomatology among Vietnam veterans.

In general, it appears that having experienced close family members or friends being sent to prison, personally assaulted, injured or killed relates to depression and anxiety as reflected in scores on the HSCL-25. In particular, PTSD symptomatology appears to be related to incidences occurring only to friends. One probable explanation for this interesting result is that subjects witnessed more abuse of friends than of family, in that Khmer families were dispersed to different slave labor camps at the beginning of the Pol Pot era. Unfortunately, other items may also reflect a relationship but were difficult to interpret because there was no variability in responses. Interestingly, these findings also corroborate the ten independent Khmer judges' weights for the trauma scale, with the exception of Item 9. Item 9 received a relatively low weight, whereas Items 11 through 18 received high weights, indicating greater trauma.

Trauma and Trauma Totals

An interesting subsequent finding of this study was the correlation coefficient between the trauma weighted scale and the trauma total score. Findings from the sample in this study empirically show trauma appears to be additive in nature and gives a very close equivalent to a weighted trauma score. Based on the sample used in this study, it

appears there exists a very high statistically significant relationship between trauma weighted and trauma total score. The only published study on Southeast refugee children, adolescents and young adults psychological disorders and trauma (Krupinski & Burrows, 1986) used weights for a total weighted stress score. This finding of this study could lead to further validation studies substantiating the use of a total additive trauma score rather than a total weighted trauma score.

Additionally, correlations between the weighted trauma with the dependent variables and the total additive trauma with the dependent variables were extremely close. It appears from the sample used in this study that the correlations between using a weighted trauma score and a total trauma score yields statistically significant similar correlations, suggesting the total trauma score gives a close equivalent. Further validation studies could empirically support findings of this study indicating the use of a total trauma score rather than the more lengthy use of weighted trauma scores.

Correlations Among Dependent Variables

Pearson Product moment correlation coefficients among all dependent variables indicated moderately high correlations. Surprisingly, the lowest correlation was between DES scores and PTSD scores, although there was a statistically positive correlation. The highest correlation was between anxiety and depression (r = .834, p < .001). However, anxiety, depression, and the composite HSCL-25 scores all correlated moderately highly with PTSD scores and DES scores. This finding supports previous research (Kinzie et al., 1984; Mollica et al., 1985) that suggested PTSD is usually found in conjunction with other DSM-III-R

disorders, typically depression in Southeast Asian refugees. The results of this study suggest that there is a statistically significant positive relationship between PTSD and DES, anxiety, depression and a composite HSCL-25 score. Relatedly, DES scores suggested a statistically significant positive relationship exists between these scores and PTSD, anxiety, depression and composite HSCL-25 scores. This study is the first known to examine dissociation as measured by DES scores and the relationship among other DSM-III-R disorders in a Southeast Asian population. Results of this study are consistent with existing research on dissociative symptomatology in subjects with PTSD (Bernstein & Putnam, 1986; Blank, 1985; Kolb, 1985). Results indicating that a moderately positive statistically significant relationship exists among DES scores and anxiety ($r = .526$, $p < .001$), depression ($\underline{r} = .584$, $\underline{p} < .001$), and composite HSCL-25 scores ($\underline{r} = .577$, $\underline{p} < .001$) are elucidating and indicate a need for further research in the area. The development of the DES marked the advent of the first reliable and valid instrument for distinguishing between subjects with and without a dissociative disorder (Bernstein & Putnam, 1986). Perhaps because it is a relatively new instrument, dissociation had not been researched in the Southeast Asian refugee population nor has the relationship between dissociation, PTSD, anxiety, depression, and composite HSCL-25 scores in this unique population. Replication of this study is needed to further validate results of this study with other Southeast Asian refugee populations.

The highest correlation between dependent variables was between anxiety and depression ($\underline{r} = .834$, $\underline{p} < .001$). Again, this substantiates

results of an earlier study (Mollica et al., 1985), which revealed that Southeast Asian refugees diagnosed as having a psychiatric disorder scored high on anxiety and depression on the HSCL-25. Further research is needed to examine the incidences of DES, PTSD, anxiety, depression, and composite HSCL-25 scores in other nonpsychiatric Southeast Asian refugee populations.

No discrepancies emerged in this study that conflicted with findings of previous limited studies on PTSD, anxiety, depression and composite HSCL-25 scores in Southeast Asian refugee adult psychiatric populations (Cohon, 1977; Kinzie et al., 1984; Mollica et al., 1985; Mollica et al., 1987; Westermeyer et al., 1983). In fact, in this nonpsychiatric sample, higher correlations would have been expected because of the greater heterogeneity of the sample as compared to the samples of psychiatric Southeast Asians. However, correlations were not greater, indicating nonpsychiatric populations of Southeast Asian refugees are very similar to empirical studies conducted on psychiatric populations and may be in need of as much help as psychiatric populations. Similarly, although this is the first known research on dissociation in any Southeast Asian adult refugee population, results of this study validate earlier studies on dissociation in populations of posttraumatic stress disorder subjects (Bernstein and Putnam, 1986; Blank, 1985; Kolb, 1985). As mentioned previously, further research is needed to study the phenomenon of dissociation in other Southeast Asian refugee populations, both psychiatric and nonpsychiatric.

Limitations

Sample Selection

Although the sample for the proposed study comprised a random sample of Khmer subjects living in Greensboro, North Carolina, findings will be most safely generalized to other Khmer refugee subjects living in Greensboro, North Carolina. The results will be limited to Khmer refugees throughout the nation arriving in America between 1983, 1984, and 1985 through (FASP) of the Office of Refugee Resettlement (ORR) to cities with demographics similar to those of Greensboro, North Carolina.

Measurement Issues

The trauma checklist and PTSD symptom checklist used in the study were not precise assessments of either the traumas these subjects endured, or the exact nature of their PTSD symptomatology. Mollica et al. (1987) indicated that Khmer refugees who had experienced multiple traumas under the Pol Pot regime may respond to comprehensive screening instruments that are emotionally intrusive by experiencing intense emotional reactions such as flashbacks. The instruments selected for the proposed study did not achieve in-depth specificity as to the exact nature of the Khmer refugees' experiences or PTSD symptomatology. The reason for this lack of specificity was that no culturally relevant resources were available in the Greensboro community for subjects to have received follow-up treatment if they had become overwhelmed by their emotions. Therefore, short and less provocative instruments were used in the study.

Different interviewing conditions at the subjects' homes resulted in variability with respect to noise, distractions, and interruptions. Therefore, interviewing procedures were less standardized than preferred. Additionally, the varying effect of fatigue on subjects posed a limitation to this study.

Translation of Instruments

The PTSD and DES instruments were translated by the most qualified Khmer translators in the state. Nary Keo, Sokhom Oum, and Nan Khoun were all knowledgable about mental health concepts, and discrepancies were discussed at great length and resolved. The PTSD symptom checklist was endorsed by Dr. Richard Mollica's Indochinese staff (personal communication, August 1988), and a test-retest with 20 subjects proved the instrument reliable with a coefficient of .85. Additionally, the trauma questionnaire was devised and translated by nationally recognized experts in the field (K. Meinhardt, personal communication, September 1988). However, nationally recognized cultural specialists and Indochinese experts were unavailable for assistance in the translation of the DES (Bernstein & Putnam, 1986).

Conclusions

Trauma was examined to explore the relationships between trauma and the psychological disorders of dissociation, posttraumatic stress disorder (PTSD), anxiety, depression, and a composite of anxiety and depression in Khmer refugees residing in the United States. The need for this study was supported by previous limited research results indicating the existence of psychological dysfunction in Southeast Asian refugees who had experienced severe psychic trauma. The findings of

this study suggest that a relationship does exist between the trauma endured by Khmer refugees and the existence of psychological disorders.

This study is the first known to examine dissociative disorders in any Southeast Asian refugee population. It supports earlier research on the severity of trauma and the development of dissociative disorders, but is unique in the population studied. Similarly, this study corroborated findings of limited earlier research with Southeast Asian refugee populations, indicating the existence of PTSD, depression, anxiety, and a composite of anxiety and depression in this population. Additionally, this study provided support for previous research suggesting PTSD usually exists in conjunction with other DSM-III-R disorders, typically depression, in Southeast Asian refugee populations.

Understanding that psychic trauma of Khmer refugees may influence the subsequent development of DSM-III disorders underscores the importance of examining both phenomena. A more precise understanding of the nature of the trauma endured and the development of specific psychological disorders should enable counselors and clinicians to more readily devise treatment plans for this unique population.

One way to facilitate an understanding of psychological disorders in Khmer refugees is through the use of reliable and valid assessment tools. This study provides counselors with two new instruments with which to assess PTSD and dissociative disorders. The development of a reliable and valid PTSD symptom checklist is now available in Khmer. Additionally, a translated version of the DES is also available in Khmer. These translated measurement devices should enhance the

practitioner's repertoire of available means of understanding pathology in Khmer populations.

Fifty Khmer men and women refugees over the age of 21 were interviewed using the Dissociative Experiences Scale, Posttraumatic Stress Disorder Symptom Checklist, the Trauma Questionnaire, and the Hopkins Symptom Checklist-25 (Cambodian version). Each instrument was scored using standardized procedures.

Statistical analyses of the data indicated that a statistically significant moderately positive relationship exists between amount of trauma and the psychological disorders examined. These findings corroborate previous limited research with this population and further validate the limited empirical research on trauma and dissociation.

Subsequent findings of the study corroborate previous research. Individual trauma items group in terms of experiencing incidents relating to family members or friends and reflect high symptomatology in anxiety and depression. Similarly, PTSD symptomatology appears to be related to experiencing incidents relating to friends.

The results of this study indicate that there is a statistically significant relationship between amount of trauma experienced by Khmer refugees and subsequent scores on the DES, PTSD symptom checklist, and a composite of the HSCL-25 (Cambodian version). Additionally, there is a statistically significant relationship between the existence of PTSD and DES, anxiety, depression, and of composite anxiety and depression as measured through the HSCL-25. This study corroborates limited earlier research with Khmer refugees, with the exception of findings related to the DES, heretofore unexamined in this population. Further research is

needed to validate findings relating to trauma and the development of dissociative disorders in the Khmer refugee.

Implications

Implications for Counselors

The information provided by the results of this study has implications for counselors and others in the helping professions who work with Southeast Asian refugees. To facilitate treatment plans for Southeast Asian refugees, two additional assessment tools have been developed by this study. First, the Dissociative Experiences Scale (DES) has now been translated into Khmer and is available for clinicians working with Khmer clients as a screening device for dissociative disorders. Second, a PTSD symptom checklist with proven validity and test-retest reliability of .85 is now available in Khmer to enable clinicians to discern the existence of posttraumatic stress disorder (PTSD) in their Khmer clients.

The addition of these two diagnostic tools to the repertoire of available translated Khmer assessment techniques may enhance the ability of counselors working with this unique population more readily to discern trauma-related symptoms. Some of the leading researchers in the field have indicated the importance of clinicians working with Indochinese refugees to obtain a detailed trauma history as well as to be able to recognize and treat trauma-related symptoms (Mollica et al., 1987). The development of the Khmer PTSD symptom checklist is specific to the Khmer refugees' experiences during the Pol Pot era and helps to fill this void. Similarly, the translated Khmer version of the DES discerns dissociative disorders in this most highly traumatized

Southeast Asian refugee population (Mollica et al., 1987).

In addition, the results of this study support the existence of psychological disorders in a nonpsychiatric Southeast Asian refugee population. Heretofore, empirical studies have focused only on psychiatric Southeast Asian refugee populations. Clinicians, counselors in schools, and other helping professionals working with these refugees should be alert to recognizing and treating trauma-related dysfunctions in Khmer refugee nonpsychiatric populations.

Another important implication for counselors working with Southeast Asian refugee populations is the element of time and trauma-related dysfunctions. The sample in this study suffered trauma between the years 1975 to 1979. In this nonpsychiatric population it appears psychological disorders may be evident at least ten years after the original trauma occurred. Although a significant amount of time had lapsed, the wounds had not healed, indicating intervention is necessary for survivors of trauma years after traumatic events have been experienced. Counselors should be sensitive to the fact that survivors of trauma may be affected deleteriously even though years many have passed since the traumatic event.

Finally, the study results additionally support earlier research indicating PTSD is invariably associated with another DSM-III disorder (usually depression) in Southeast Asian refugee populations. As these findings corroborate earlier findings, this may alert counselors to the potential for multiple diagnoses of DSM-III disorders. In summary, the findings of this study may enable counselors to expedite treatment for their Southeast Asian refugee clients suffering from trauma-related

psychological disorders. A more precise understanding of the psychological impact of trauma on Khmer refugees has emerged through this study. Although trauma-related research is in its infancy, these findings may facilitate treatment plans for this unique population despite cultural discrepancies that previously may have impeded the counselor's diagnostic ability.

Implications for Research

The information provided by the results of this study has implications for future research. At this writing, this is the only known research identified on dissociative disorders to be conducted on any Southeast Asian refugee population in the United States or other countries. This research needs to be replicated to further validate findings on dissociative disorders in other Southeast Asian refugee populations, both psychiatric and nonpsychiatric.

In addition, further validation studies are needed on the total weighted trauma scores and simple additive total trauma scores. The results of this study point to trauma totals being more additive in nature. Further studies are needed validating that simply adding the total number of traumas suffices rather than the more time-consuming and complicated weighting of each individual trauma item for a total weighted trauma score.

Finally, research needs to be done with other nonpsychiatric Khmer refugees throughout the nation. The results of this study pertain to Khmer refugees resettled in an urban, mid-sized Southern community. More research is needed among nonpsychiatric Khmer refugees in both more metropolitan and rural populations.

Recommendations

Cross-cultural research is at best a difficult task. This study did not deviate in this respect. However, certain issues emerged as a result of this study that could enhance future research with the Khmer refugee ethnic group studied in the United States.

As few researchers speak the Cambodian language, it is impossible to conduct research without qualified translators. Such translators will, in almost all cases, be Khmer refugees themselves. The sensitivity of the researcher to the feelings of the translator is especially important in collecting data on the nature of trauma. As the translator has frequently experienced incidences similar to those of the subjects, it is imperative that the researcher not overwhelm the translator by collecting data hurriedly. Again, as the translator is repeatedly exploring provocative issues of his or her own through questionning subjects, the researcher should not only be sensitive to this fact but encourage and provide opportunities for the translator to discuss his or her feelings. This is not only important to the translator, but helps to ensure the reliability of the data collected.

Data collection for this study was obtained through interviews at the residences of the Khmer subjects. As indicated earlier, appointments were made at all households prior to the actual data collection. In some instances, subjects were found in an intoxicated state from the abuse of alcoholic substances. In such an event, the appointment was rescheduled. It should be noted here for future studies researchers and counselors should be well aware of the severe alcohol abuse among Khmer refugee adult men and women. It appeared from the

sample in this study that alcohol abuse is a problem in this population similar to that of others having suffered severe psychic trauma such as in the population of Vietnam veterans. Counselors should be sensitive to this fact when working with Southeast Asian refugee adults.

In collecting data, a qualified and diplomatic translator can mitigate potential difficulties in instances when refugees are intoxicated. Therefore, it is essential that the translator be respected and well-liked among the Khmer sample intended for study. The recognition of the confidential nature of the research and the ability of the translator to conduct the research in a confidential manner are essential to the successful collection of data in this cross-cultural research.

Another recommendation concerning the confidential and sensitive nature of the data collection is the importance of both translator's and researcher's awareness of referral services and available resources in the community should subjects become overwhelmed. In some major metropolitan areas with large concentrations of Southeast Asian refugees, there are professional services readily available. In this study conducted in Greensboro, North Carolina, there were no follow-up services available for subjects. In this instance, a nontraditional but appropriate means for acquiring assistance for these refugees was implemented: The translator worked closely with Buddhist monks who were available to help in the event subjects were in need of follow-up services.

The findings generated by this study corroborate previous research in the area. However, dissociative disorders, although believed to be

closely linked to psychic trauma (Putnam, 1985), had heretofore been unexamined in any Southeast Asian refugee population. Although the DES (Bernstein & Putnam, 1986) was translated a total of four times for this study, nationally recognized Indochinese experts were unavailable for translation assistance. Future research on dissociative disorders in Khmer refugees using the DES (Bernstein & Putnam, 1986) should further validate the current translation of the DES (Bernstein & Putnam, 1986) with nationally renowned Khmer experts, if at all possible.

Finally, one important ancillary finding of this study is the actual incidence of DSM-III psychological disorders in a nonpsychiatric random sample of adult Khmer refugees. Heretofore, nonpsychiatric samples of Khmer refugees had not been studied. In order for Khmer refugees to obtain the professional assistance they need, similar future research is needed to validate the trauma Khmer refugees have endured and subsequent psychological dysfunctions that impair their ability to lead fulfilling lives in America.

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Appendix A

Research Interviewer's Manual

Research Interviewer's Manual

Pages 7 and 8 and pages 20 through 29 were given to the translator for review. Permission was obtained to use the manual. These pertinent sections contained information useful in cross-cultural interviewing.

think about something new and challenging that he/she had previously not contemplated. The skillful interviewer can help make the interview an opportunity for guided, systematic reflection on one's life experiences--in effect, a "life review" of the experience of exile.

5. One of the prime factors involved is just plain curiosity. Often a respondent's first reaction is "What is this all about?" It is quite obvious that the best way to find out is by participation. In addition, project results (which will reflect and give voice to the respondents' experience) will be made available to all interested respondents who participate in the project.

THE ETHICS OF RESEARCH INTERVIEWING

The activity of research interviewing involves not only technical and sociopsychological dimensions, but also legal and moral dimensions. Risk of harm can potentially come to the respondent as a result of careless or insensitive interviewing, or as a result of disclosures to others of personal information provided in confidence by the respondent. In order to eliminate these risks to the respondent, CHRP is committed to uphold various protection standards and procedures.

CHRP will be reviewed and approved by the Committee on Protection of Human Subjects at San Diego State University. Throughout the research without exception, the identities of respondents and other subjects will be protected under strict standards of medical confidentiality, as will the various sources of information which provide assistance in enumerating the universe of this population. CHRP findings will naturally only be published in aggregate form. The following internal procedures will be rigorously observed to maintain the confidentiality of all record sources used in the project, and to protect the privacy of respondents:

1. In obtaining the relevant universe, lists of names and addresses will be gathered from the Montagnard Project Director for the Lutheran Family Services, Greensboro, North Carolina (with proper authorization). No other

2. When the list of possible respondents is gathered from the Central Highlander community in Greensboro, North Carolina, a separate list will be merged. The list of names will then be alphabetized, and any source codes will be erased.

3. Respondents will participate in the study only on the basis of informed consent procedures worked out fully with the Human Subjects Committee at San Diego State University and approved by the Department of Sociology, San Diego State University. A respondent who does not wish to participate in the study may refuse to do so without penalty or pressure of any kind. A respondent agreeing to participate in the interview must first sign a consent form clearly explaining the implications of such participation, the length of the interview, etc.

4. When an interview has been completed, the data will be coded in numerical form and entered anonymously into a computer for data processing and analysis. All interview protocols and tapes will be kept in locked storage with access restricted solely to the Project Director; these will be destroyed after final data processing and analysis. All data processing will proceed under strict standards of medical confidentiality; the training and supervision of field interviewers will emphasize and enforce adherence to these rules and standards. Interviewers will also sign an affidavit of confidentiality agreeing to abide by these rules.

5. Final analyses and reports generated by the project will present finding only in aggregate form. The anonymity of respondents will be honored and maintained throughout the research, from the initial enumeration, to the sampling, to the interviewing, coding, data processing, and final analysis.

Strict adherence to these procedures and ethical standards in the conduct of the research should both ensure the protection and confidentiality of persons and groups participating in the study, and the scientific integrity of the research.

More specifically, consider that the interviewer-respondent relationship is a professional relationship governed by norms of professional ethics. Respondents should participate in the study [illegible] of informed consent and voluntary [illegible]

INTERVIEWING PRINCIPLES AND PROCEDURES

This next section represents an attempt to set forth a number of principles which, when applied, will result in sound interviewing. The principles have been deliberately kept broad whenever possible so as to serve as guides rather than as restrictive chains. The reasons underlying most principles have been explained in detail to enable the interviewer to understand and use them flexibly and effectively. Although several examples of the application of the principles have been given, their use has been limited in order not to give the impression that the principles are applicable only to the cases illustrated. Quite the contrary is true: it is intended that the principles cover a wide range of situations. In some sense, then, the principles represent a "philosophy" of interviewing rather than unchangeable, inflexible rules.

A. INTRODUCING THE RESEARCH PROJECT AND ESTABLISHING RAPPORT

The success of each interview depends considerably on the ability of the interviewer to create a friendly, supportive atmosphere of mutual trust and confidence when the respondent is first contacted. There is no one best way of establishing this rapport, for the best way of doing this with one respondent will be inadequate with another. People differ in socioeconomic status, character, health, and experience with interviewers and salesmen, and they have different expectations of "pollsters." These differences must be taken into account, and exactly how this is done is dependent on how sensitively the interviewer perceives these differences and can adapt the interview situation to them. Needless to say, establishing rapport cannot be done instantaneously; it takes place throughout the course of the interview. The first impression made on the respondent is very important, however, for it "sets" the respondent to perceive the interviewer and the survey in a manner which may be either beneficial or detrimental to the purpose of the survey.

How can this atmosphere of rapport be established? It must again be said that the desired atmosphere can be established only to a greater or lesser degree. There is no way of knowing beforehand how desirable an atmosphere can be created, and it is therefore necessary to follow certain principles which are likely to bring about rapport. As applies to most principles, they should be used intelligently and adaptively in accordance with situational needs--the nature of the survey, the characteristics of the respondent, the place of interview, and so forth.

The follow...

1. The Interviewer Must Introduce Himself/Herself and State the Purpose of the Interview.

Aside from being courteous, such an introduction serves to dispel immediately any suspicion that the interviewer is a salesman. For the Central Highlander respondents in this project, a brief introduction may not be sufficient. They may need to know who you are, where you come from, how many brothers and sisters you have, how long you have stayed in the United States, who hired you, how the respondents are selected, how you come to know where they live, why the research investigators want to do this study, and many other questions. You should, therefore, be prepared not only to give a brief introduction about the purpose of this study and who the research investigators are, but also to answer questions about yourself, your background, and family. Before they are willing to talk about themselves, the respondents will want to know something about you. The advantage of being openly friendly about disclosing some information about yourself is that the respondent can feel that you are "one of us." It creates a sense of belonging to the same ethnolinguistic culture, and of mututal compassion for what they have gone through during their exile and their search for a livelihood in this country.

It is to your advantage to hand the prospective respondent your identification card to inspect while you are making introductory remarks. The gesture serves to hold the attention of the respondent and lends credence to the purpose of your visit. It allows them to verify your identity and establishes the fact that you are, indeed, not a salesman nor an underground or government agent. Remember too that we will have previously contacted the respondent by phone and letter, and arranged the appointment for you.

As you are explaining the purpose of this study, be sure to stress that any information that is supplied to you during the interview will be treated as absolutely confidential matters. After the respondent has admitted you to his/her home, and you are both comfortably seated, bring up the subject of written consent.

Remember, the law now requires that written consent be obtained from all research involving human subjects. YOU CANNOT START AN INTERVIEW UNLESS YOU HAVE RECEIVED WRITTEN CONSENT FROM THE RESPONDENT. You will be given a supply of written consent forms to be filled out by the respondents (A copy of this consent form is appended to the section on "Ethics," above.) It is possible that some of your responders may hesitate to sign their name. You should do your best to persuade them that this is designed to protect them, i.e., to make sure that no one walks into their homes and asks them all sorts of questions when in fact the purpose of their visit is NOT to do research. You should also point out that another reason for wanting their signature is to allow the Project Director and his/her staff to check on <u>you</u>— to ensure that you have indeed interviewed somebody in house X, and did not simply make up

Highlander refugees may still share the dread of legal complications that some people in the Southeast Asia have traditionally nurtured. If, at this point, the respondent changes his/her mind entirely about being interviewed and you feel that further persuasion is futile, politely make and exit. Do not force an interview.

Once written consent is obtained, you should start the interview as soon as possible, to avoid taking up too much of the respondent's time. If someone asks how long it will take, do not misrepresent but avoid being too precise, for the length of an interview does vary. It is best to say something vague but reassuring like, "It's hard to say, because it depends on how much you have to say about the subject. I would estimate about _____."

You may also want to inform the respondent that some of the questions you will be asking may seem to be unusual or too direct, but that it is important that the questions be asked in that way for scientific research purposes. The Project Director, in the course of developing and pretesting the questionnaire, has tried to rephrase or eliminate any survey questions that seemed culturally inappropriate, but still the very nature of this type of survey may seem foreign to many Indochinese respondents. Let the respondent feel that if he/she cannot answer a question, you will understand and go on to the next. But you should use this option only when absolutely necessary.

In general, the introduction should cover the following four important points:

a. Who is conducting the survey. Introductory statements should indicate that the organization by whom the interviewer is employed is reliable. This should overcome possible suspicions that a hard or soft "sell" is in the offing, or that a government, credit, or collection agency is making an investigation. CHRP is being conducted by a Masters candidate at San Diego State University, and is funded privately.

b. The subject and purpose of the survey. The subject and purpose ofthe survey should be stated rather broadly, for if given in too much detail answers to subsequent questions may be suggested. A general statement ofthe purpose of the survey and emphasis of the fact the respondent's ideas are what is wanted will usually overcome this type of difficulty.

c. How the respondent happened to be chosen. Respondents are very frequently curious, even suspicious, about how they, in particular, were chosen to be interviewed. Unless they are given a satisfactory answer they may think that the interviewer has an ulterior motive and, as a result, give biased answers. As you know, respondents in CHRP are chosen through a saturation sampling technique. In other words, respondents are

not chosen by chance. This explanation is accurate and will usually satisfy a respondent. If warranted, you can add that the respondent's cooperation is essential to ensure the most scientifically valid and generalizable results.

d. The interview is confidential. Although it sometimes does not matter whether a respondent is told that the answers obtained in the interview are confidential, it is safer to point this out explicitly. In no case should the oint be given much emphasis, however, unless the respondent raises the issue. Emphasis on the confidential aspects of the survey arouses suspicion in many people and makes others excessively self-conscious, for a "confidential" interview might imply that something in the interview might cause embarrassment if revealed.

2. The Interviewer Must Make the Respondent Feel That the Survey is Important.

People are generally more likely to cooperate if the survey in which they are requested to participate is shown to be important, though it need not be directly important to the respondent. The statement that a survey is of direct importance to every respondent is often so patently unlikely that it is insulting. It is therefore best, when possible, to state frankly the purpose of the survey, why and to whom it is important. For suggestions, see the earlier section on "The Objective of this Research." (In point of fact, CHRP is one of the most important research studies dealing with the Central Highlander refugee experience ever done in he United States, and its implications for public policy, public education, and other fields are far-reaching).

3. The Interviewer Must Make the Respondent Feel that His/Her Answers are Important.

Respondents often find it difficult to understand why it is important for them, in particular, to answer the survey questions, especially when they have been told that they were chosen by chance. They should be told that chance selection is the only way to guarantee an unbiased cross-section of people, and that since they are part of the cross-section the interview with them is very important.

A related point which respondents should, but do not always, understand is that their own true answers to questions are important, no matter how unrepresentative they might be. Respondents who, for example, have extreme opinions or are otherwise atypical frequently say, "You don't want to interview me. I'm very different from most people around here and my answers would mess up your survey." This is quite wrong, of course; atypical answers are just as important to survey researchers as

are "average" ones. If this point is understood, conveying the idea of permissiveness should be facilitated and the respondent's motivation to cooperate should be increased.

4. The Interviewer's Appearance Must Be Neutral.

An interviewer's physical appearance, including clothing, accessories, and make-up (in the case of women) are probably the source of first impression made on a respondent. Since physical appearance can place an interviewer, rightly or wrongly, in some class, such as an economic or opinion class, and since this can have a biasing effect on an interviewer's responses, it is necessary that physical appearance be as neutral as possible.

5. Be Courteous and Tactful.

It is of utmost importance that your manner, under all circumstances, should be courteous and conciliatory. Under no circumstances are you to lose your temper or indulge in any disputes. The primary function of the interviewer is to learn what the respondent believes about the subjects on the schedule without influencing that opinion in any way. No matter what the respondent says, it should be accepted without any show of surprise or disapproval.

6. The Interviewer's Approach Must Be Flexible.

The principles which have been stated are guides rather than hard-and-fast rules. Although most interviews have much in common, each differs from the others in some respect. The interviewer must learn to perceive the differences between interview situations quickly at the very beginning of the introduction and adjust his/her introductory remarks accordingly. However, adapting the interview to the needs of the situation must be guided by the principles stated earlier and in the following sections.

B. CHOOSING THE SETTING FOR THE INTERVIEW

Once the interviewer has introduced the survey and the respondent has agreed to answer questions, an appropriate setting for the interview must be chosen. This is often no problem, for the respondent will invite the interviewer into the living room or some quiet room. It happens fairly often, however, that suitable conditions are not possible or immediately provided. It is therefore useful to specify by a few broad principles what constitutes suitable

1. The Interview Should Be Conducted In A Quiet, Comfortable Place.

Since most interviews take one to two hours to complete, excluding introductory remarks, and require some thought on the respondent's part, quiet and comfort are desirable. To request this of the respondent may also underline the importance of the survey. These conditions are especially beneficial.

On the other hand, be prepared to adapt to less than desirable conditions whenever necessary. Keep in mind that you will usually be arriving at the respondent's home with another interviewer, and that the two of you will usually be separately interviewing an adult male and an adult female respondent. The family may also live in a small apartment, and it may not be possible to find desirable conditions for private interviewing. In adapting to this, however, try whenever possible to follow the prescribed guidelines; this is even more important with regard to #2 following:

2. The Respondent Must Be Interviewed Alone.

Unless instructions specify the contrary, no one but the interviewer and respondent should be present during an interview. The presence of even one other person may influence a respondent's answers and therefore bias them. There is a tendency for many people to modify the "true" answer to a question so that it is in better accord with what the respondent believes are the answers of the other persons present. If the respondent perceives no difference between his/her answer and those of others there would be no bias, of course; yet there is no way for the interviewer to know what is going on in the respondent's mind as a result of the presence of other people. Hence, no other people should be present. In this connection it is worth noting that the interviewer potentially has the same biasing effects as other persons; however, he/she has been trained to appear as neutral as possible so that the respondent will find it difficult to estimate what the interviewer's answers to certain questions might be and therefore will have little basis for modifying his/her answers.

C. THE QUESTIONNAIRE IS DESIGNED TO HELP BUILD RESPONDENT INTEREST

We have already mentioned that good rapport with the respondent is necessary if the interviewer is to secure full and accurate information. The techniques used by the interviewer are all designed to help in rapport-building. This by no means excludes the questionnaire itself since it has a direct effect on the relations

interest. The wording of the questions is an important factor in this regard. The order in which the questions are asked is also important. Since the order in which the questions are asked can affect the answers, it is vital that interviewers follow the sequence exactly as directed in the instructions found in the interview schedule.

D. HOW TO GET ALONG IN THE INTERVIEW SITUATION: A SUMMARY

Put your respondent at ease. This is the key to successful interviewing.

Always introduce yourself to the respondent if the respondent is someone other than the person answering the door. This is the first thing to do to put the respondent at ease. Don't overwhelm your respondent with your introduction.

Be informal. Act natural with the respondent. If the house is in a state of turmoil with children underfoot, do not act uncomfortable.

Be conversational. A conversational attitude is sure to put the respondent at ease.

Be professional. To be conversational and informal, an interview need not be long winded. Remember that you and the respondent are both busy people. If the respondent starts to stray far afield from the point of the interview, don't be afraid to politely pull him back on the track. While the respondent may act cordial, a long interview is a strain and will make the respondent less willing to be interviewed again for the follow-up study. Leave while you are still welcome!

Keep the interview situation as private as possible. If you are in a room with other people, be extra watchful of this. Direct your questions to the respondent and don't let your attention wander to other parts of the room.

Be absolutely neutral. Don't show any opinion or judgments on the respondent's statements, person, or manner. Never show surprise at a respondent's behavior. Do not identify yourself with any particular group, and above all, don't try to peg the respondent. Nothing destroys an interview so fast as a respondent's realization that the interviewer is not interested in the interview but rather in him as some sort of social oddity.

in this section. The questionnaire is the basic tool with which information is obtained in order to reduce the researcher's uncertainty about a particular matter. As mentioned previously the questions it contains have been carefully designed and pretested to obtain valid and reliable answers.

We have mentioned some of the principles which require the interviewer to use the questionnaire in the prescribed way. If these principles are not followed, survey information is likely to be inaccurate. Thus, the interview plays two roles in the interview:

- That of the technician who applies standard techniques to each interview.
- That of the human being who builds up a permissive and warm relationship with each respondent.

The question now arises: what specific techniques can the interviewer use in carrying out these two roles? The following will supply some answers to this question.

1. Use the Questionnaire, But Use It Informally.

The interview should proceed on as informal and relaxed a plane as possible, and the interviewer should avoid creating the impression that the interview is in any sense a quiz or cross-examination. The interviewer must be careful that nothing in his or her words or manner implies criticism, surprise, approval or disapproval of the questions asked or the respondent's answers. Put each question to the respondent in a natural and conversational tone of voice, not obviously reading it.

2. Ask the Questions Exactly As Worded On the Questionnaire.

As it is essential that exactly the same questions be asked of each person interviewed; the interviewer should make no changes in the phrasing of the questions. Not only are deliberate word changes to be avoided; the interviewer must be on guard against unconscious word changes. For example, in constantly repeating the questions during interviewing, the interviewer may unwittingly leave out part of the question, or change some words. Or, the interviewer may ask the question just as worded, but in an effort to be conversational, may add a few words at the end of the question. Experiments have shown that even a slight change of wording can distort results. You can both be natural and ask the questions without rewording by practicing beforehand, as we will during the training sessions.

3. Ask the Questions In the Order Presented On the Questionnaire

It has also been established that the order in which alternatives are presented has, in some cases, an effect on responses. If some interviewers vary the order of alternatives in a question, the responses to these questions cannot be combined with the responses obtained by interviewers who adhered strictly to the question wording. The sequence is also arranged so that early questions will not have a harmful effect on the answers given later.

4. Ask Every Question Specified On the Questionnaire

In answering a particular question, respondents will occasionally give an answer which can also be applied to a question further along in the schedule. Or, from time to time, when the interviewer needs to ask a series of apparently "similar" questions, the respondent may say, "Just put me down as 'Yes' to all of them." In this case, the interviewer may wonder whether he should skip the questions which are apparently answered.

The answer to this question is "no." In cases where asking the question will lower rapport dangerously, the interviewer must, of course, be satisfied with what she/he already has. However, it is the interviewer's responsibility to make certain, whenever possible, that the respondent is fully exposed to each question specified on the schedule.

5. If the Question Is Not Understood, Or Misinterpreted.

The questionnaire planners have carefully worded and pretested each question to insure that it is understandable to a maximum number of respondents. Therefore, you will have no difficulty in the great majority of cases. From time to time, however, a respondent will not understand a question, or will misinterpret it. In such instances, you should use the following procedure:

a. First, repeat the question as it is written and give the respondent another chance to answer it on that basis. If you suspect that the respondent merely needs time to think it over, do not press him or her for an immediate answer.

b. If you still do not get a response in terms of the wording and meaning of the question, reword the question slightly. This will happen only once in a great while, and should be done only as a last resort. Furthermore, a record of the rewording should be made

Appendix B

Instructions (English)

Translation of Instructions (Khmer)

Back-Translation of Instructions (English)

Instructions (English)

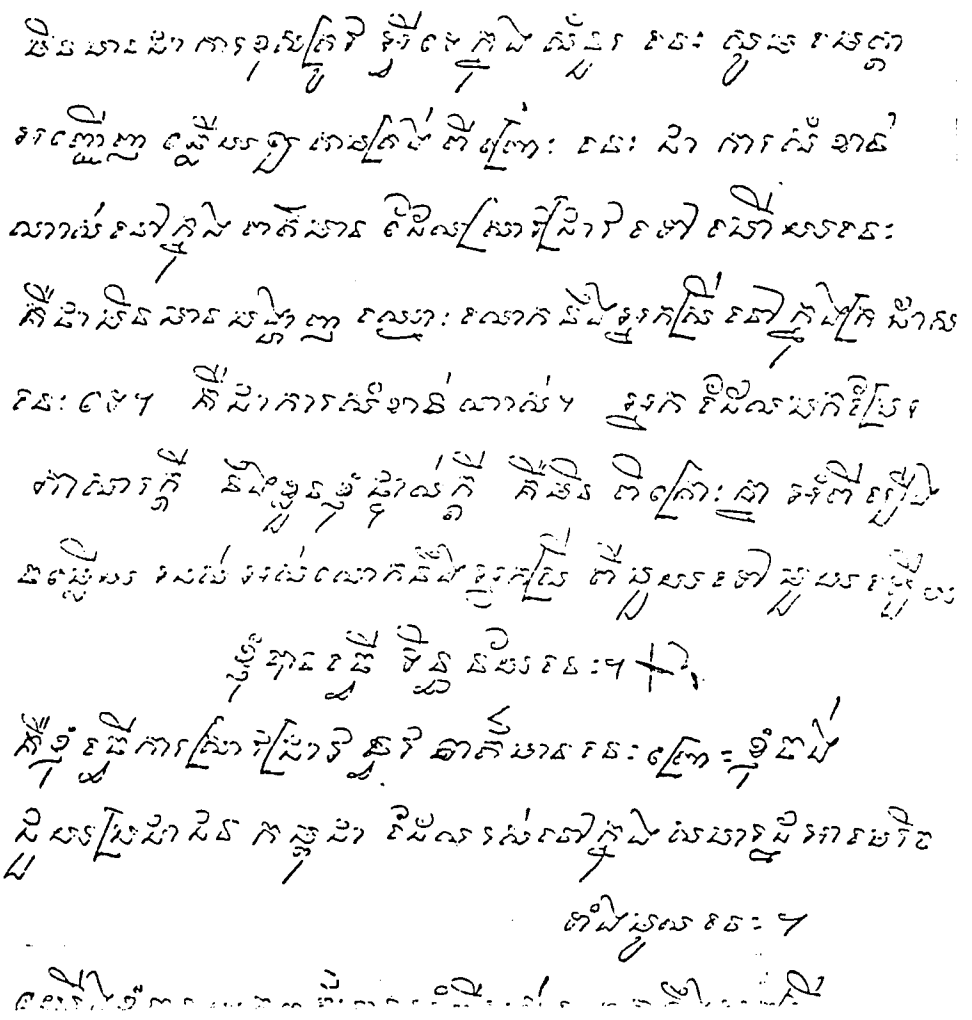
I want to thank you for your participation in this project. Many people do not understand the experiences of the Cambodian people in America. The following questionnaires are to find out about feelings you may sometimes experience as well as questions concerning your life in Cambodia before coming to America. There are no right or wrong answers to any of these questions. Please respond honestly. It is important. The information collected will not have your name on it. It is extremely confidential and the translator and myself will not discuss any of your answers with each other or other people. I am simply collecting data to use in this research to find out information to help the Cambodian people in America as a whole. We are not collecting information on you for any purpose other than to see how you feel so it may be possible for Americans to better understand the Cambodian people. I am most grateful for your honest help and participation. If at any time you feel uneasy or want to you can stop and not answer any more questions. Just let me know. If you don't understand a question also stop me so it can be explained. Do you have any questions?

(1)

Translation of Instructions (Khmer)

Instructions

(ข)



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ខ្ញុំសូមជម្រាបជូនលោកអ្នកថា ខ្ញុំបានសិក្សាលើសៀវភៅ
ដែលលោកអ្នកបានផ្តល់ជូនខ្ញុំ ហើយខ្ញុំក៏បានធ្វើតាមការ
ណែនាំដ៏ល្អរបស់លោកអ្នកដែរ ដូច្នេះខ្ញុំសង្ឃឹមថា
លទ្ធផលនៃការប្រឡងរបស់ខ្ញុំនឹងមានភាពល្អប្រសើរ
ជាងមុន។ ខ្ញុំសូមថ្លែងអំណរគុណយ៉ាងជ្រាលជ្រៅ
ចំពោះលោកអ្នកដែលបានជួយខ្ញុំក្នុងការសិក្សា
ពីមុនមក។

ចុងក្រោយនេះ ខ្ញុំសូមជម្រាបជូនលោកអ្នកថា ខ្ញុំនឹង
ប្រឹងប្រែងរៀនសូត្រឱ្យកាន់តែខ្លាំងឡើង ដើម្បីឱ្យ
ខ្ញុំមានចំណេះដឹងកាន់តែច្រើន។ សូមលោកអ្នក
ជួយផ្តល់ការណែនាំដល់ខ្ញុំបន្ថែមទៀត
ដើម្បីឱ្យខ្ញុំអាចរៀនបានកាន់តែល្អ។ ខ្ញុំនឹងខិតខំ
ប្រឹងប្រែងឱ្យបានខ្លាំងជាងមុន ដើម្បីមិនឱ្យ
លោកអ្នកខកចិត្តចំពោះខ្ញុំ។ ខ្ញុំនឹងមិនធ្វើឱ្យ
លោកអ្នកខកចិត្តឡើយ។

Back Translation of Instructions (English)

I want to express my heartiest thanks to all of you that join with us in this job.

There is a lot of people in the United State who do not know about the suffering of Kampuchean people.

The following questions is the research about some feelings that you have experienced when you were in Kampuchea. It has nothing wrong in this questions, pleae answer to them exactly right, because it's very important. In the information that we collect from you, we are not going to show your name in that paper. It's very important. Either the translator or me, we are not discussing your answer from one to another.

I do this research, because I want to help Kampuchean people who live in the whole United States.

We want to get this information from all of you is to know about your feeling (mind).

And also it can be easy to American people to understand very well about Kampuchean people.

We thank you very much for your sincere and help to support us this program (job).

If you don't want to answer this question, please let me know in advance.

If you don't understand these questions, please I'll explain them to you.

Do you have anymore question?

Appendix C

Dissociative Experiences Scale (English)

Translation of DES (Khmer)

Back-Translation of DES (English)

Second Translation of DES (Khmer)

Second Back-Translation of DES (English)

Dissociative Experiences Scale (English)

DES

Eve Bernstein Carlson, Ph. D. Frank W. Putnam, M. D.

DIRECTIONS

This questionnaire consists of twenty-eight questions about experiences that you may have in your daily life. We are interested in how often you have these experiences. It is important, however, that your answers show how often these experiences happen to you when you are **not** under the influence of alcohol or drugs. To answer the questions, please determine to what degree the experience described in the question applies to you and mark the line with a vertical slash at the appropriate place, as shown in the example below.

Example:

0% |----------/----------| 100%

Date _____ Age _____ Sex: M F _____

1. Some people have the experience of driving a car and suddenly realizing that they don't remember what has happened during all or part of the trip. Mark the line to show what percentage of the time this happens to you.

   0% |----------| 100%

2. Some people find that sometimes they are listening to someone talk and they suddenly realize that they did not hear part or all of what was said. Mark the line to show what percentage of the time this happens to you.

   0% |----------| 100%

3. Some people have the experience of finding themselves in a place and having no idea how they got there. Mark the line to show what percentage of the time this happens to you.

   0% |----------| 100%

4. Some people have the experience of finding themselves dressed in clothes that they don't remember putting on. Mark the line to show what percentage of the time this happens to you.

   0% |----------| 100%

5. Some people have the experience of finding new things among their belongings that they do not remember buying. Mark the line to show what percentage of the time this happens to you.

   0% |----------| 100%

6. Some people sometimes find that they are approached by people that they do not know who call them by another name or insist that they have met them before. Mark the line to show what percentage of the time this happens to you.

   0% |----------| 100%

7. Some people sometimes have the experience of feeling as though they are standing next to themselves or watching themselves do something and they actually see themselves as if they were looking at another person. Mark the line to show what percentage of the time this happens to you.

   0% |----------| 100%

8. Some people are told that they sometimes do not recognize friends or family members. Mark the line to show what percentage of the time this happens to you.

   0% |----------| 100%

10. Some people have the experience of being accused of lying when they do not think that they have lied. Mark the line to show what percentage of the time this happens to you.

0% |----------| 100%

11. Some people have the experience of looking in a mirror and not recognizing themselves. Mark the line to show what percentage of the time this happens to you.

0% |----------| 100%

12. Some people have the experience of feeling that other people, objects, and the world around them are not real. Mark the line to show what percentage of the time this happens to you.

0% |----------| 100%

13. Some people have the experience of feeling that their body does not seem to belong to them. Mark the line to show what percentage of the time this happens to you.

0% |----------| 100%

14. Some people have the experience of sometimes remembering a past event so vividly that they feel as if they were reliving that event. Mark the line to show what percentage of the time this happens to you.

0% |----------| 100%

15. Some people have the experience of not being sure whether things that they remember happening really did happen or whether they just dreamed them. Mark the line to show what percentage of the time this happens to you.

0% |----------| 100%

16. Some people have the experience of being in a familiar place but finding it strange and unfamiliar. Mark the line to show what percentage of the time this happens to you.

0% |----------| 100%

17. Some people find that when they are watching television or a movie they become so absorbed in the story that they are unaware of other events happening around them. Mark the line to show what percentage of the time this happens to you.

0% |----------| 100%

18. Some people find that they become so involved in a fantasy or daydream that it feels as though it were really happening to them. Mark the line to show what percentage of the time this happens to you.

0% |----------| 100%

20. Some people find that that they sometimes sit staring off into space, thinking of nothing, and are not aware of the passage of time. Mark the line to show what percentage of the time this happens to you.

0% |----------| 100%

21. Some people sometimes find that when they are alone they talk out loud to themselves. Mark the line to show what percentage of the time this happens to you.

0% |----------| 100%

22. Some people find that in one situation they may act so differently compared with another situation that they feel almost as if they were two different people. Mark the line to show what percentage of the time this happens to you.

0% |----------| 100%

23. Some people sometimes find that in certain situations they are able to do things with amazing ease and spontaneity that would usually be difficult for them (for example, sports, work, social situations, etc.). Mark the line to show what percentage of the time this happens to you.

0% |----------| 100%

24. Some people sometimes find that they cannot remember whether they have done something or have just thought about doing that (for example, not knowing whether they have just mailed a letter or have just thought about mailing it). Mark the line to show what percentage of the time this happens to you.

0% |----------| 100%

25. Some people find evidence that they have done things that they do not remember doing. Mark the line to show what percentage of the time this happens to you.

0% |----------| 100%

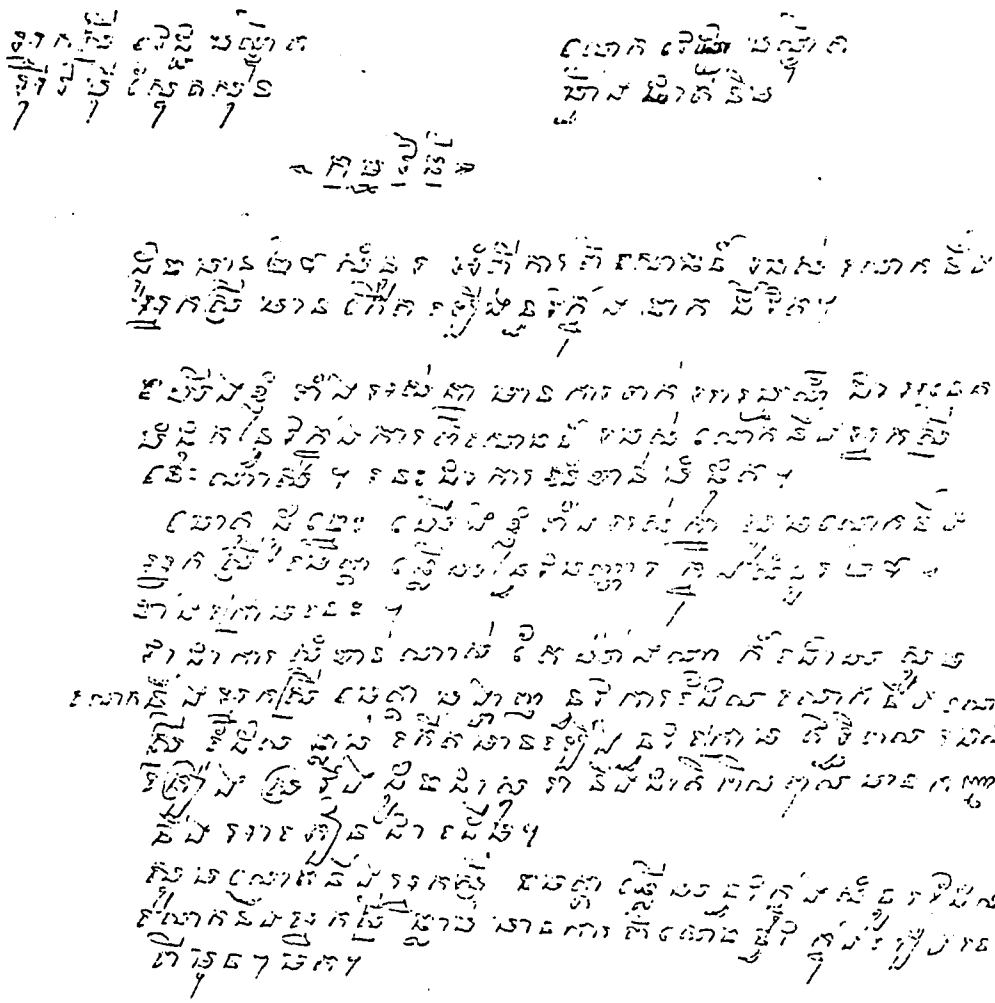
26. Some people sometimes find writings, drawings, or notes among their belongings that they must have done but cannot remember doing. Mark the line to show what percentage of the time this happens to you.

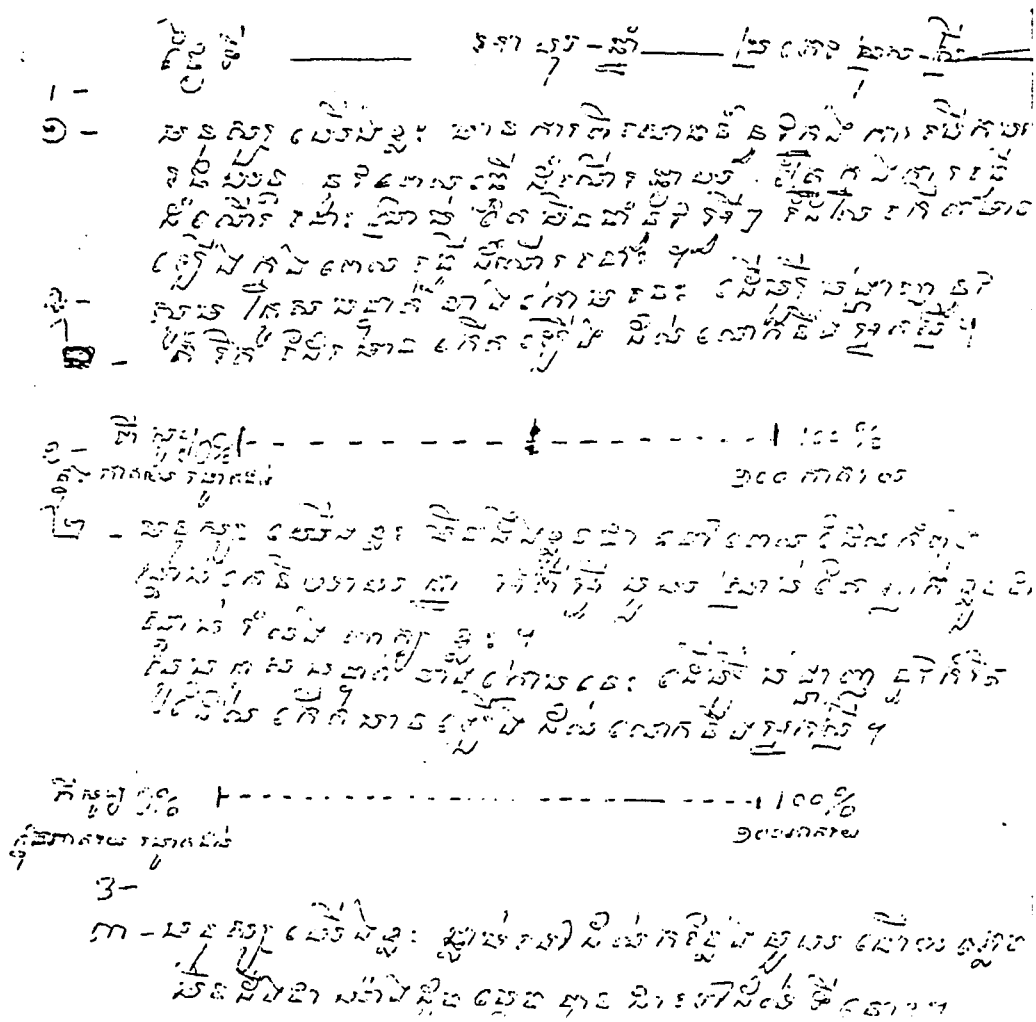
0% |----------| 100%

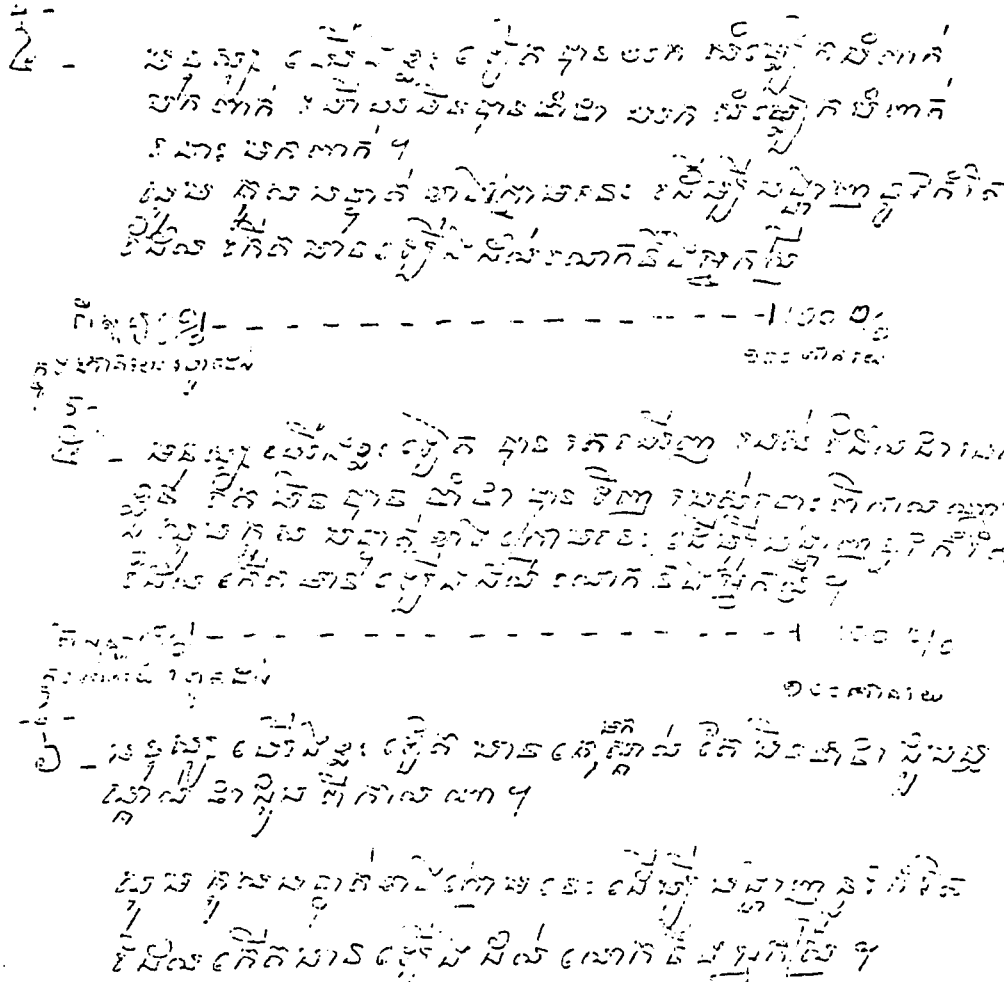
27. Some people sometimes find that they hear voices inside their head that tell them to do things or comment on things that they are doing. Mark the line to show what percentage of the time this happens to you.

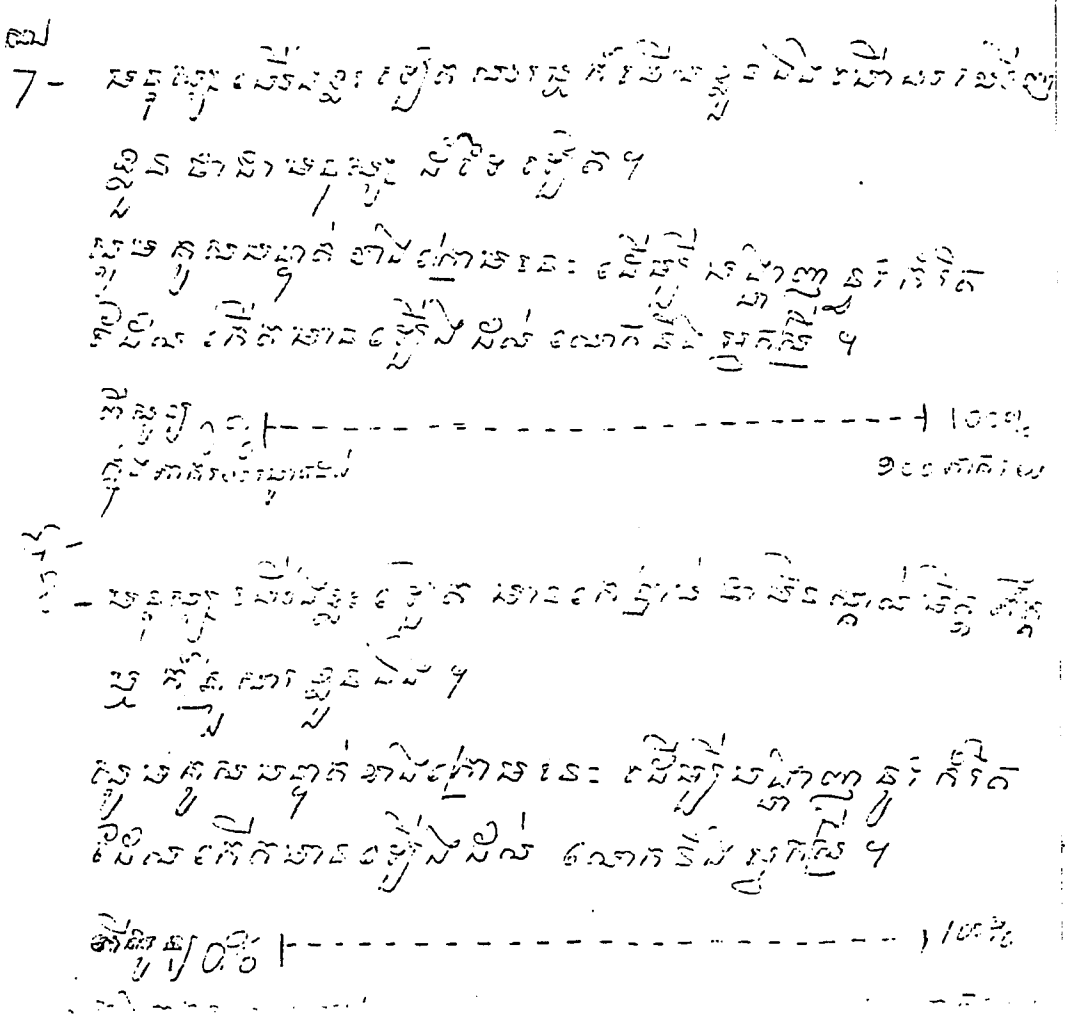
0% |----------| 100%

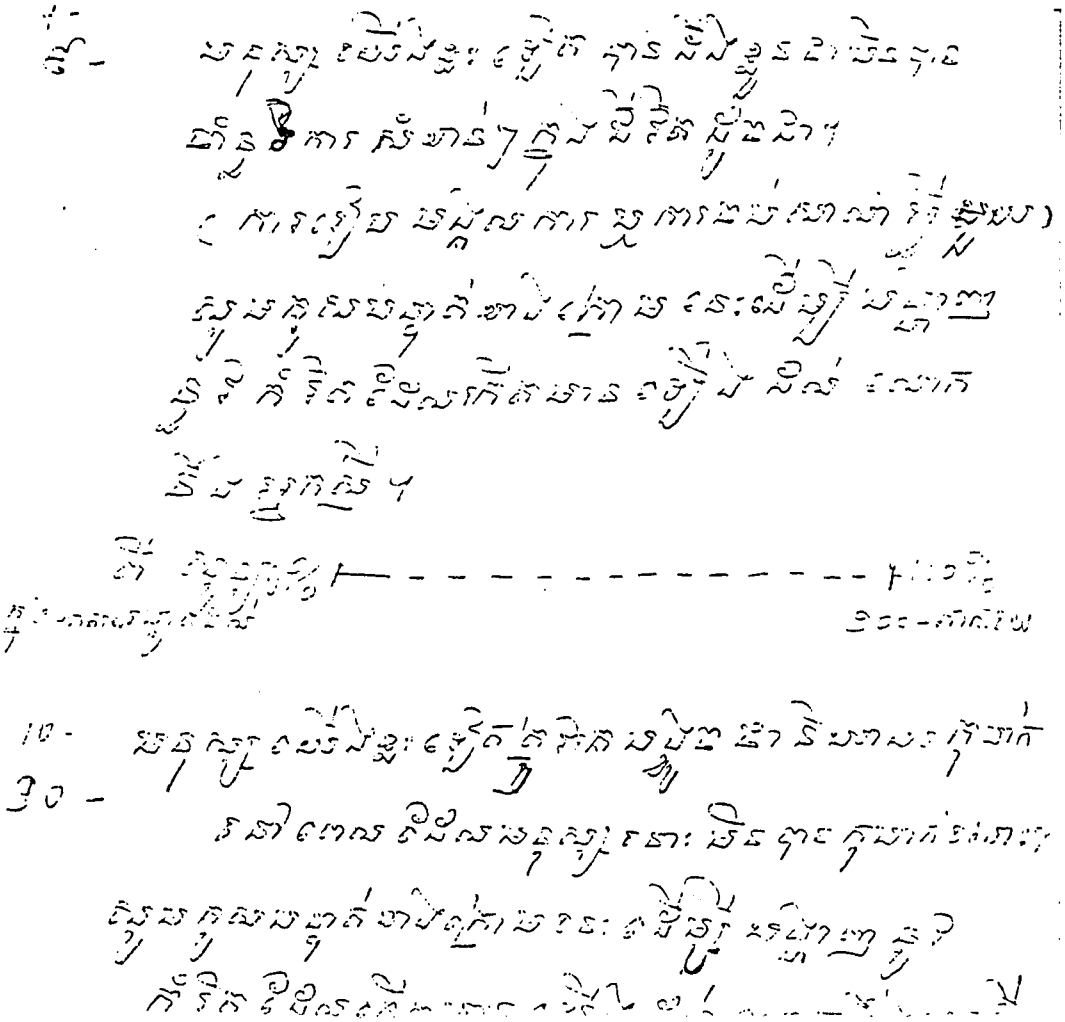
Translation of DES (Khmer)

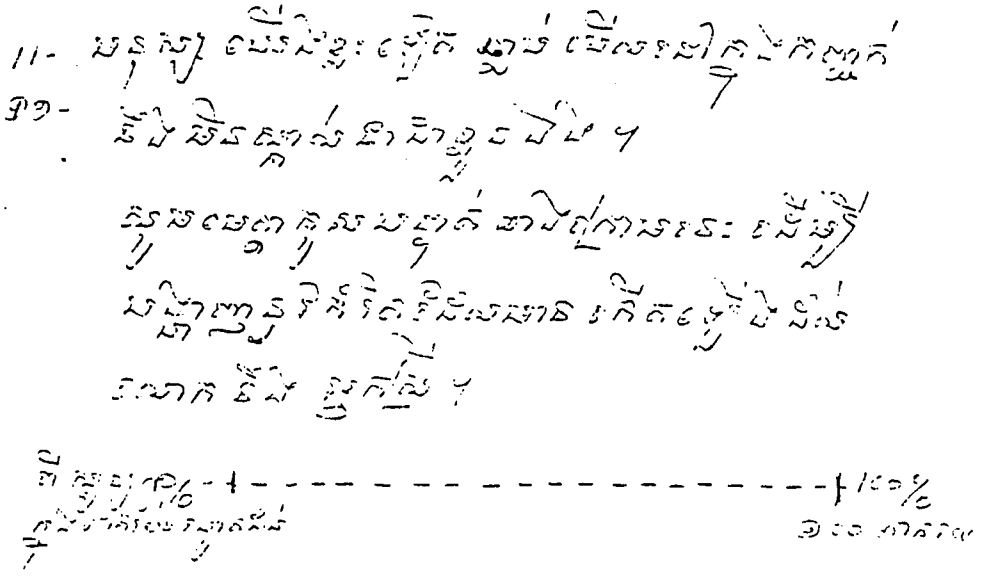


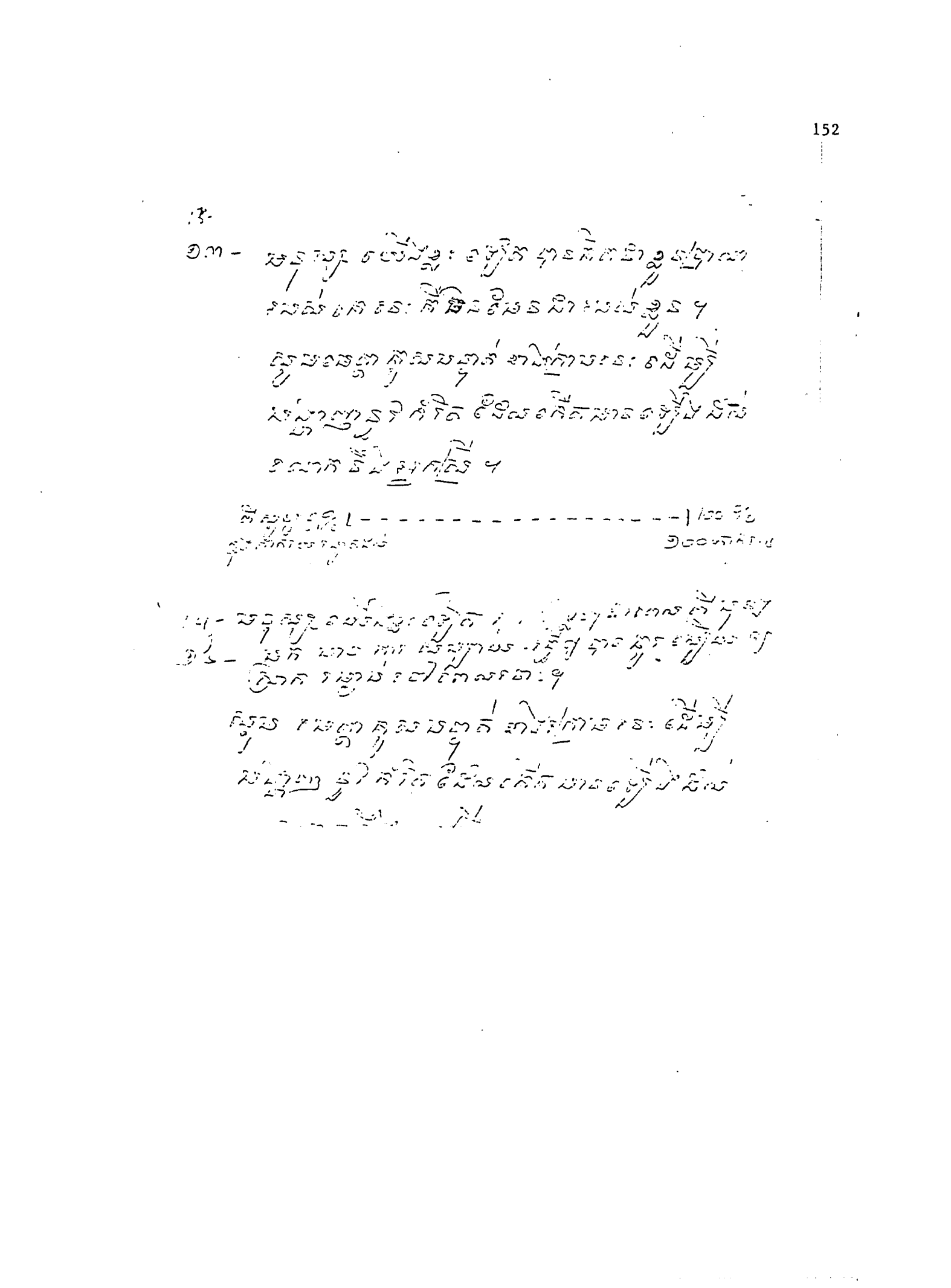


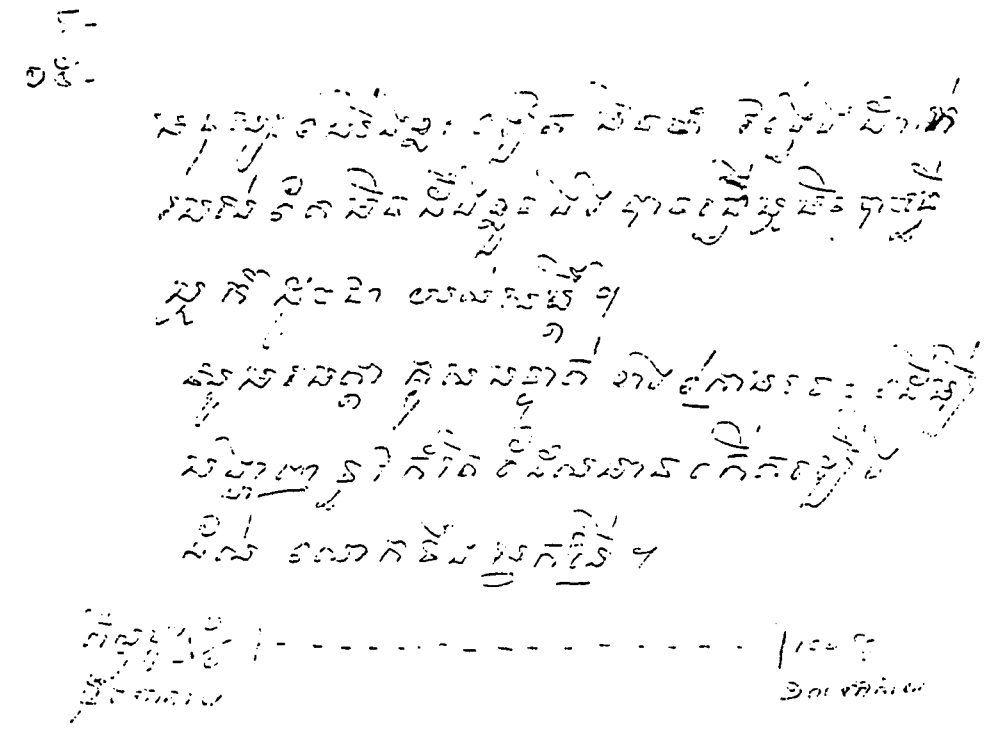












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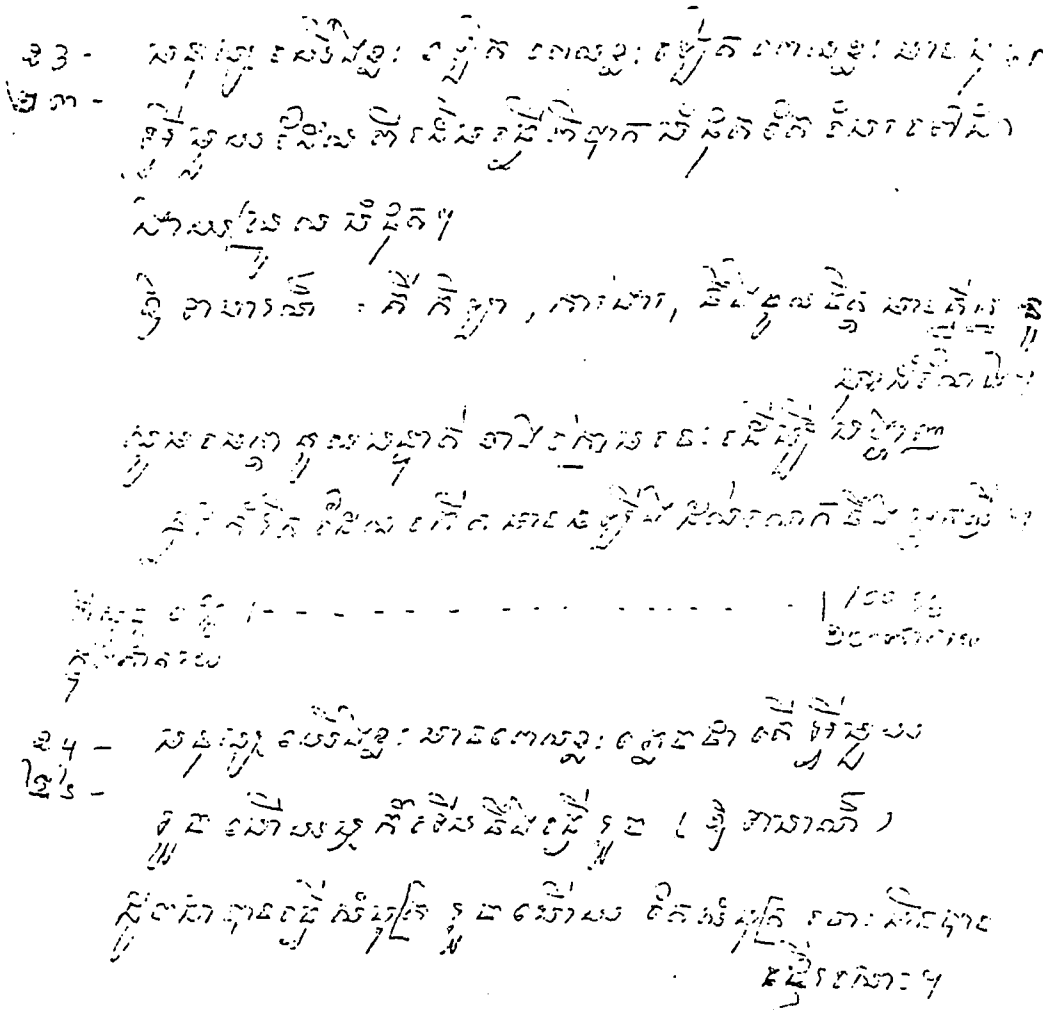

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Back-Translation of DES (English)

Dr. _____ Dr. _____

Program

Thre are 28 questions about the experience that happened in your life. It's very important.

So would you please answer these following 28 questions.

It's very interesting, however, please indicate the problem that happened to you *under the drug addict such as alcohol, marijuna and opium etc.

Would please answer the question that you used to have the experience in this story.

Please underline, the vertical line, in this sample picture below.

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From zero percent Hundred percent

Date _____ Age _____ Sex _____

1. Some people have a good driving experience, but when they take a long trip soemwhere they don't remember anything in that trip.

Please underline in this picture below to show the degree that happened to you in this experience.

0%- -100%

Zero percent Hundred percent

2. Some people don't know that they have missed some words while they listened to someone talking.

Please underline in this picture below to indicate the degree of your experience.

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Zero percent Hundred percent

3. Some people used to get in one place, but they don't remember how can they get there.

Please underline in this picture below to show the degree of your experience.

0%- -100%

Zero percent Hundred percent

4. Some people brought some clothes to wear, but they don't remember that they put them on.

Please underline in this picture below to indicate the degree of your experience.

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Zero percent Hundred percent

5. Some people have found something that belong to them, but they don't remember when they bought it.

Please underline in this picture below to show the degree of your experience.

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Zero percent Hundred percent

6. Some people have known by someone but they remember when did they know or meet them.

Please underline in this picture below to indicate the degree of your experience.

0%- -100%

Zero percent Hundred percent

7. Some people stand and look at themself, but they think it's not myself, it's the other people

Please underline in this picture below to show the degree that happened to you this experience.

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Zero percent Hundred percent

8. Some people sometime don't know your friend and family.

Please underline in this picture below to indicate the degree of your experience.

0%- -100%

Zero percent Hundred percent

9. Some people didn't remember some important things in their life such as (marriage or finished school).

Please underline in this picture below to indicate the degree of your experience.

0%- -100%

Zero percent Hundred percent

10. Some people have someone accuse that they are a lier when they didn't lie.

Please underline in this picture below to indicate the degree that happened in this experience.

0%- -100%

Zero percent Hundred percent

11. Some people used to look in the mirror, and they don't know the picture in the mirror is theirself.

Please underline in this picture below to indicate the degree of

your experience.

0%- -100%

Zero percent Hundred percent

12. Some people feel that the world around them are not true.

Please underline in this picture below to show the degree of your experience.

0%- -100%

Zero percent Hundred percent

13. Some people have a feeling that their own body isn't theirs.

Please underline in this picture below to indicate the degree that happened to you in your experience.

0%- -100%

Zero percent Hundred percent

14. Some people said before they were happy so it can kill their time then.

Please underline in this picture below to indicate the degree of your experience.

0%- -100%

Zero percent Hundred percent

15. Some people don't remember that they put something somewhere themself and they don't know they did it or not or a dream.

Please underline in this picture below to indicate the degree of your experience.

0%- -100%

Zero percent Hundred percent

16. Some people remembered that they know that place, but when they are

there they said I don't know and don't remember this place.

Please underline in this picture below to present the degree of your experience.

0%- -100%

Zero percent Hundred percent

17. Some people have seen the movies or watched television. They are happy and they forgot and they were not thinking that something has happened around them.

Please underline in this picture below to indicate the degree of your experience.

0%- -100%

Zero percent Hundred percent

18. Some people have sat down and imagined to one story that make them happy that time and it's true.

Please underline in this picture below to indicate the degree of your experience.

0%- -100%

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19. Some people are sick, but they do like they aren't sick.

Please underline in this picture below to indicate the degree of your experience.

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Zero percent Hundred percent

20. Some people have a feeling that sometime they sat down and looked up the sky. The thought that it has nothing up there and they don't know the time.

Please underline in this picture below to indicate the degree of your experience.

0%- -100%

Zero percent Hundred percent

21. Some people have a feeling when they are alone, sometime they talk, and shout themself.

Please underline in this picture below to indicate the degree of your experience.

0%- -100%

Zero percent Hundred percent

22. Some people, sometime when they get a position in one job they act strange or different, and compare to another position they act like two different person.

Please underline in this picture below to indicate the degree of your experience.

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Zero percent Hundred percent

23. Some people, sometime, they got a job that was very difficult for them, but it become very easy.

Please underline in this picture below to indicate the degree of your experience.

0%- -100%

Zero percent Hundred percent

24. Some people, sometime, forgot that they have done something or just got done. Example: Have written a letter, but didn't mail it out.

Please underline in this picture below to indicate the degree of your experience.

0%- -100%

Zero percent Hundred percent

25. Some people do some bad thing, but they don't remember that they did it.

Please underline in this picture below to indicate the degree of your experience.

0%- -100%

Zero percent Hundred percent

26. Some people have picked out picture, letters and something else, but they don't remember that they have picked out or not.

Please underline in this picture below to indicate the degree of your experience.

0%- -100%

Zero percent Hundred percent

27. Some people heard the noise in their brain, and that noise order them to do one thing.

Please underline in this picture below to indicate the degree of your experience.

0%- -100%

Zero percent Hundred percent

28. Some people look at the east. They seem that it's foggy and saw the person come out from far and couldn't see them clearly.

Please underline in this picture below to indicate the degree of your experience.

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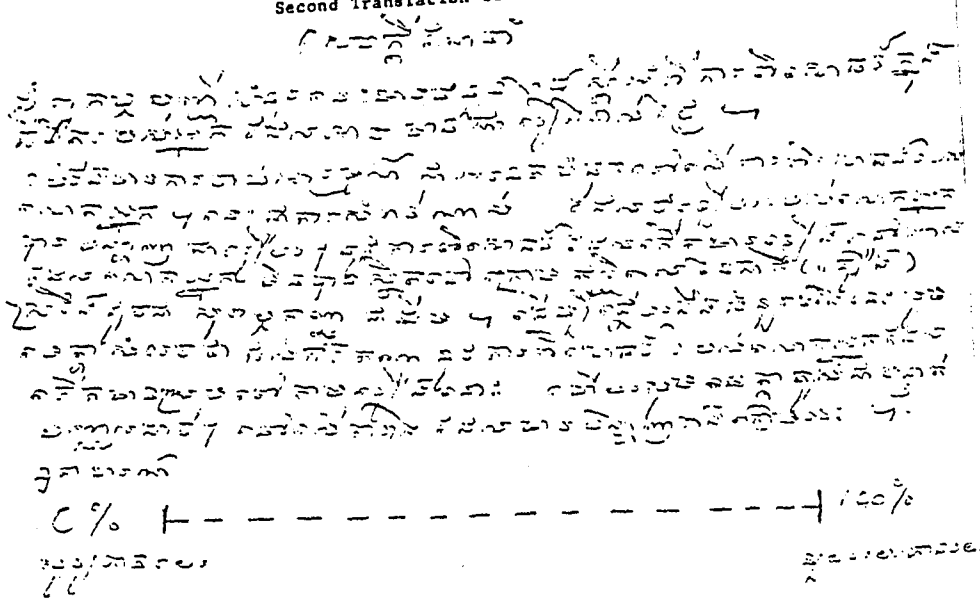
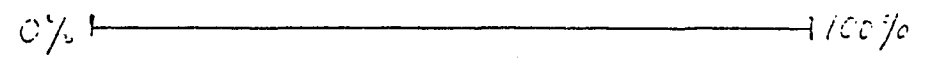
Zero percent Hundred percent

Second Translation of DES (Khmer)

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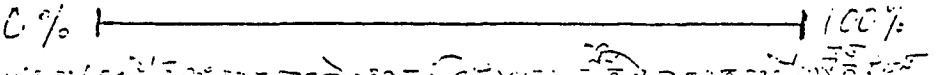
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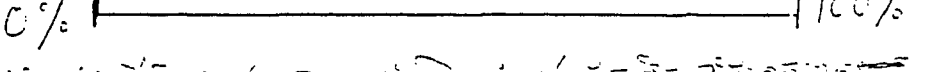
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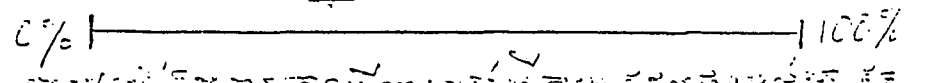
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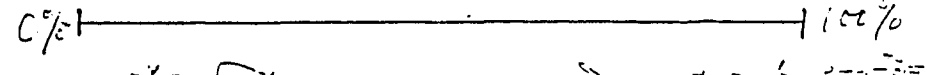
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Second Back-Translation of DES (English)

1. Some people have the experience of driving a car and suddenly they don't know what has happened during all of the trip or some part of the trip. Please mark the line to show what percentage of the time that this happened to you.

2. Some people realize that they are listening to someone talk and suddenly they know that they do not hear a part or all of what they have said. Please indicate the percentage of the time that this has happened to them.

3. Some people have the experience of finding themselves in a place, but they have no idea how they got there. Please mark the percentage of time that this happens to you.

4. Some people have the experience of putting on themselves clothes, but they don't remember dressing. Please mark the percentage of time that this has happened to you.

5. Some people have the experience of finding things among their belongings, but they don't remember when they buy it or how they got it. Please indicate the percentage of time that this has happened to you.

6. Some people have found themselves approached by people they don't know who call them by another name or insist that they have met them before. Please indicate the amount of time that you have experienced this.

7. Some people have a feeling of thinking that they are standing next to themselves and watching themselves do something as if they were

looking at themselves. Please indicate the amount of time that this has happened to you.

8. Some people don't recognize their family members or close friends. Please mark the line to show what percentage of time that this has happened to you.

9. Some people have no memory for some important events in their lives. Please indicate the percentage of time that this has happened to you.

10. Some people have the experience of being accused of lying when they think that they do not lie. Please mark the percentage of time that this has happened to you.

11. Some people have the experience of looking in a mirror, but they don't recognize themselves. Please indicate the amount of time that this has happened to you.

12. Some people have a feeling that people, object, and the world around them are not true (real). Please mark the line to show the percentage of time that this has happened to you.

13. Some people have a feeling as though their own body isn't theirs. Please indicate the percentage of time that this has happened to you.

14. Some people have the experience that sometimes they remember the things in the past so strong and they feel like it happens again. Please indicate the percentage of time that this has happened to you.

15. Some people have the experience of something happened to them, but they don't know if it is true (real) or the dream. Please indicate

on the line the percentage of time that this has happened to you.

16. Some people have the experience of knowing one place very well. However, they find it different. Please mark the line to show the percentage of time this has happened to you.

17. Some people have watched T.V. or movies and they forget and they aren't aware of anything that is happening around them. Please indicate the amount of time that this has happened to you.

18. Some people have a feeling being involved too much with imagination or day dreams, and they think that they are real (true) and have happened to them. Please mark the line to show the percentage of time that this has happened to you.

19. Some people sometimes can forget they have pain even if they feel it. Please mark the line to show the percentage of time that this has happened to you.

20. Some people are sitting and looking at the sky, and they don't realize how much time passed by. Please indicate the amount of time that this has happened to you.

21. Some people realize that when they are alone, they talk to themselves. Please mark the line to show the percentage of time that this has happened to you.

22. Some people act different in one place compared to the way they act in another place; they act like two different people. Please indicate on the line the percentage of time that has happened to you.

23. Some people sometimes know that in one place they can do very easily the thing that used to be difficult for them in another

place. Please mark the line to show the percentage of time that this has happened to you.

24. Some people realize that they are not able to remember whether there are things that they have done or something that they are thinking of doing, such as mailing a letter or getting ready to mail the letter. Please mark the line to show the percentage of time that this has happened to you.

25. Some people realize that they have got something done, but they don't remember doing it. Please indicate the amount of time you experienced this on the line.

26. Some people have found letters, pictures, or notes among their belongings. However, they don't remember doing it. Please indicate on the line the amount of time that you have experienced this.

27. Some people have heard a noise or voice in their brain that commands (tells) them to do something or describes something they are doing. Please mark the line to show the amount of time that this has happened to you.

28. Some people have a feeling as if they are looking at the world through the fog so that people and objects appear far away or unclear. Please indicate the percentage of time that this has happened to you.

Appendix D

PTSD Symptom Checklist (English)

Translation of PTSD Checklist (Khmer)

Back-Translation of PTSD Checklist (English)

Second Translation of PTSD Checklist (Khmer)

Second Back-Translation of PTSD Checklist (English)

PTSD Symptom Checklist (English)

Tell me yes or no if any of the below have happened to you recently.

_____ 1. Unwanted, upsetting memories about bad things that happened to you in Cambodia.

_____ 2. Nightmares.

_____ 3. Flashbacks (Suddenly feel like you are back in Cambodia experiencing a horrible event.)

_____ 4. Getting very upset after something reminds you of something bad that happened to you in Cambodia.

_____ 5. Avoiding thinking about bad things that happened in Cambodia.

_____ 6. Avoiding situations that remind you of bad things that happened in Cambodia.

_____ 7. Forgetting (not being able to remember) the bad things that happened to you in Cambodia.

_____ 8. Trouble falling asleep.

_____ 9. Waking up in the middle of the night.

_____ 10. Feeling irritable or angry.

_____ 11. Trouble concentrating.

_____ 12. Being very aware and nervous of what is going on around you.

_____ 13. Easily startled (surprised and scared).

_____ 14. Becoming shaky, sweaty, nervous, having a fast heartbeat after something reminds you of something bad that happened to you in Cambodia.

Translation of PTSD Checklist (Khmer)

P.T.S.D [illegible]

[illegible]

—— ១ - [illegible]

[illegible]

[illegible]

—— ២ - យល់ ~~[illegible]~~ សប្តិ អាក្រក់ ។

—— ៣ - [illegible]

[illegible]

—— ៤ - [illegible]

[illegible]

[illegible]

—— ៥ - [illegible]

— ៦ – ស្រៀវស្រើបខ្លួនការលើកដូនតា ភាព អាក្រក់ រំជួលចិត្ត
មានទៀតនៅក្នុងប្រទេសកម្ពុជា។

— ៧ – ដំណើរ (មិនដែលបាច់ឆ្លើយ ទំនើក) ទៅកាន់គេ
ដូចអ្នកក់ ដល់ លោកអ្នក រំដួល កើតមាន
ទៀតនៅក្នុងប្រទេសកម្ពុជា។

— ៨ – មាន ទៀត ទឹក លើក និង សក់។

— ៩ – ការពិតជាក់ នូវ ការលាស់ ។

— ១០ – មានដីធ្លី ស្រែ ភ្លូ មានដី ទៀត។

— ១១ – មានទៀត ការរីករាលដាល មិនឃើញ។

— ១២ — ការ ដឹងខ្លួន ដោយ ពិន្ទុ ខ្លួន មានទៀត ស្រួល
ជឿ លើ ការបញ្ចូល នូវ វិញ្ញាណ។

— ១៣ – ដាប់ ត្រាក់ ផ្ដើល លោយខ្លួន។

Back-Translation of PTSD Checklist (English)

P-T-S-D OBSERVATION TABLE

Please tell me about old world or not in these following questions:

1. Don't want, depression (worry) when thinking about cruel action that happened in Kampuchea.

2. Nightmare.

3. Imagined that go back to Kampuchea and got punished.

4. Very worried after seeing something that make to remember about the bad and cruel action that happened in Kampuchea.

5. Avoid of thinking to the bad and cruel action that happened in Kampuchea.

6. Avoid remembering to bad and cruel action that happened in Kampuchea.

7. Forget (Don't want to start thinking) about bad thing that happened in Kampuchea.

8. Have a store that cannot make you to go to sleep.

9. Wake in the middle of the night.

10. Have a bad tempered (or be anxious) have anger.

11. Have a story that cannot remember.

12. Knowing that have something around make them scare.

13. Be quickly panic and scare.

14. When you were thinking about you past in Kampuchea that make you shaking (trembling) sweating, caring and stiring.

Second Translation of PTSD Checklist (Khmer)

Second Back-Translation of PTSD Symptom Checklist (English)

Please tell me Yes or No on these following questions:

_____ 1. Unwanted, upsetting memories about something bad that has happened to you in Cambodia.

_____ 2. Nightmares.

_____ 3. Flashbacks (Suddenly feel like you are back in Cambodia and have experienced a horrible thing).

_____ 4. Get very upset after something reminds you of something bad that has happened to you in Cambodia.

_____ 5. Avoid thinking about bad things that have happened in Cambodia.

_____ 6. Avoid reminding situations of bad things that have happened to you in Cambodia.

_____ 7. Forget (cannot remember) the bad things that have happened to you in Cambodia.

_____ 8. Trouble falling asleep.

_____ 9. Waking in the middle of the night.

_____ 10. Feel irritable or angry.

_____ 11. Trouble concentrating.

_____ 12. Very aware and nervous of what is happening around you.

_____ 13. Very easily startled (surprised and scared).

_____ 14. Become shaky, sweaty, nervous, have a fast heartbeat after knowing something reminds you about bad things that happened to you in Cambodia.

Appendix E

Hopkins Symptom Checklist (Cambodian version)

HOPKINS SYMPTOM CHECKLIST 25

CAMBODIAN VERSION

NAME _____ DATE _____ CLINICIAN _____

DATE OF BIRTH _____ SEX _____ MARITAL STATUS _____

Instructions

Listed below are some symptoms or problems that people sometimes have. Please read each one carefully and decide how much the symptoms bothered or distressed you in the last week, including today. Place a check in the appropriate column.

PART I ANXIETY SYMPTOMS	Not at all	A little	Quite a bit	Extremely
1. Suddenly scared for no reason				
2. Feeling fearful				
3. Faintness, dizziness, or weakness				
4. Nervousness or shakiness inside				
5. Heart pounding or racing				
6. Trembling				
7. Feeling tense or keyed up				
8. Headaches				
Spells of terror or panic				

	PART II DEPRESSION SYMPTOMS	1 Not at all	2 A little	3 Quite a bit	4 Extremely
11.	Feeling low in energy, slowed down				
12.	Blaming yourself for things				
13.	Crying easily				
14.	Loss of sexual interest or pleasure				
15.	Poor appetite				
16.	Difficulty falling asleep, staying asleep				
17.	Feeling hopeless about the future				
18.	Feeling blue				
19.	Feeling lonely				
20.	Thoughts of ending your life				
21.	Feeling of being trapped or caught				
22.	Worrying too much about things				
23.	Feeling no interest in things				

SCORING

Responses are summed and divided by the number of answered items, to generate three scores:

$$\text{ANXIETY} = \frac{\text{ITEMS 1-10}}{10} \rightarrow \square$$

$$\text{DEPRESSION} = \frac{\text{ITEMS 11-25}}{15} \rightarrow \square$$

$$\text{TOTAL} = \frac{\text{ITEMS 1-25}}{25} \rightarrow \square$$

Individuals with scores on anxiety and/or depression and or total ≥ 1.75 are considered symptomatic. See Manual for additional information.

developed by
INDOCHINESE PSYCHIATRY CLINIC
BRIGHTON MARINE PUBLIC HEALTH CENTER
DEPARTMENT OF PSYCHIATRY
ST. ELIZABETH'S HOSPITAL
AND
THE HARVARD PROGRAM IN PSYCHIATRIC EPIDEMIOLOGY

Funded by the U.S. Office of Refugee Resettlement

Appendix F

Trauma Questionnaire (English)

Translation of Trauma Questionnaire (Khmer)

Trauma Questionnaire (English)[1]

Since April 17, 1975, did you experience:

	YES	NO
1. A serious food shortage?	1	2
2. The feeling that your life was in danger?	1	2
3. Relatives or friends forced to move in with you?	1	2
4. The feeling that your relatives or friends were in danger?	1	2
5. Relatives who disappeared?	1	2
6. Friends who disappeared?	1	2
7. Reunion with family members after having lost contact with them?	1	2
8. Change in residence for economic reasons?	1	2
9. Change in residence for political reasons?	1	2
10. Change in residence because of proximity to battle areas?	1	2
11. A close family member who was sent to prison for political reasons?	1	2
12. A close family member who was personally assaulted (including rape)?	1	2
13. A close family member who was injured when getting out of the country?	1	2

[1]This trauma questionnaire (English) is a modified version of the original questionnaire in that it has been numbered and rearranged for the ease of the reader.

Since April 17, 1975, did you experience:

	YES	NO
14. A close family member who was killed when getting out of the country?	1	2
15. A friend who was sent to prison for political reasons?	1	2
16. A friend who was personally assaulted (including rape)?	1	2
17. A friend who was injured when getting out of the country?	1	2
18. A friend who was killed when getting out of the country?	1	2
19. Yourself being sent to prison for political reasons?	1	2
20. Yourself being personally assaulted (including rape)?	1	2
21. Yourself being injured when getting out of the country?	1	2

Translation of Trauma Questionnaire (Khmer)

card 6

6. [illegible] ?

1 0-6 [illegible]
2 6-12 [illegible]
3 12-24 [illegible]
4 [illegible] 24 [illegible] 16.

II. A. [illegible] 31 [illegible] 1975 [illegible]:

B. [illegible] 17 [illegible] 1975 [illegible]:

C. [illegible] 31 [illegible] 1975 [illegible]:

1. [illegible] ? 17

2. [illegible] ? 18

3. [illegible] ?

a. [illegible] 19

b. [illegible] 20

4. [illegible] ? 21

III. A. [illegible] 31 [illegible] 1975 [illegible]:

B. [illegible] 17 [illegible] 1975 [illegible]:

C. [illegible] 31 [illegible] 1975 [illegible]:

	[illegible]	[illegible]	[illegible]	[illegible]	
1. [illegible] ?	1	2	7	8	22
2. [illegible] ?	1	2	7	8	23
3. [illegible] ?	1	2	7	8	24

	[illegible]	[illegible]	[illegible]	[illegible]	Card col.
b. [illegible] ([illegible])	1	2	7	8	29
c. [illegible] ?	1	2	7	8	30
d. [illegible]	1	2	7	8	31
6. [illegible]					
a. [illegible] ?	1	2	7	8	32
b. [illegible] ([illegible])	1	2	7	8	33
c. [illegible]	1	2	7	8	34
d. [illegible] ?	1	2	7	8	35
7. [illegible]					
a. [illegible] ?	1	2	7	8	36
b. [illegible] ([illegible])	1	2	7	8	37
c. [illegible]	1	2	7	8	38

Appendix G

Confidentiality Statement

Confidentiality Statement

I, Mr. Sokhom Oum, translator for this project with the Khmer people, do hereby swear all information I hear from subjects is confidential and will be discussed only with Mrs. Rhonda Rosser-Hogan, principal investigator, if necessary.

Signed