Acculturation, Premigration Traumatic Experiences, and Depression Among Vietnamese Americans

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SUMMARY. This study investigated the role of acculturation as a potential mediator or moderator for premigration traumatic experiences (PTE) and depression. The mediator effect refers to an effect in which acculturation mediates the negative impact of PTE on depression. On the other hand, the moderator effect signifies an interaction effect in which acculturation buffers the impact of PTE on depression. In other words, the negative impact of PTE on depression is hypothesized to vary according to different levels of acculturation. These two competing hypotheses were tested in a community-based sample of 261 adult Vietnamese Americans aged 25 and over. The sample consisted of 48% males and 64% of the sample were married. The average length of residence in the U.S. was 7 years. Multiple regression analyses did not support the mediator effect of acculturation, but did support its moderator effect as a buffer of PTE. Specifically, PTE had a much stronger effect on depression among those with lower levels of acculturation than those

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with higher levels of acculturation. Implications for future research and clinical practices are discussed.

KEYWORDS. Acculturation, premigration, trauma, depression, Vietnamese

INTRODUCTION

Previous studies have not investigated the role of acculturation as a mechanism for coping with stress. However, it appears that immigrants who have successfully acculturated to the host society tend to report a more positive mental health status than those who are not so successful in their acculturation process (Tran, 1993; Vega, Warheit, Buhl-Auth, & Meinhardt, 1984). Thus, if acculturation is viewed from the context of coping, it may have profound clinical implications for mental health prevention among immigrants and refugees, especially those who have been exposed to mass traumatic experiences prior to coming into a host country. The purpose of this study is to evaluate two conceptual models concerning the role of acculturation as a potential mediator or moderator of premigration traumatic experiences (PTE) on depression among Vietnamese Americans. The mediator role of acculturation suggests that it mediates the effect of PTE on depression. More specifically, PTE leads to higher feelings of depression but its effect would be weaker when controlling for acculturation. The moderator role of acculturation suggests that, given the effect of PTE on depression, its effect will be weaker for those individuals with higher levels of acculturation. In other words, high acculturation will moderate the negative impact of PTE on depression.

Acculturation was originally described by anthropologists as a group-level process in which there are profound cultural changes when individuals from two different cultures interact or have regular contact (Redfield, Linton, & Herskovits, 1936). While it is assumed that mutual changes occur during this process, significant changes are expected to occur in the ''non-dominant'' group as opposed to the ''dominant'' group. Although understanding the process of acculturation at the group-level remains an important area of research in cross-cultural psychology, considerable attention has been given to changes at the individual-level as well. It has been noted that individuals undergoing the process of acculturation frequently experience many important changes. Among these are physical changes (e.g., having a new living environment); biological changes (e.g., contracting new diseases); political

changes; economic changes; cultural changes; social/interpersonal changes, as well as psychological changes (Berry & Kim, 1988). These physical and behavioral changes and their impact on the individuals' mental health and social adjustment have been well documented among refugees and immigrants

Understanding acculturation of immigrants or refugees in a host society is an important matter at both the policy and intervention levels. It has generally been assumed that immigrants can make successful transition between cultures and that their acculturation can be managed, by both the individuals and social agencies of the host culture, to enhance successful adaptation and to reduce or prevent emotional distress (Berry, 1990). Thus, the ability of newly arrived refugees or immigrants to make a smooth transition into their host society indicates the success of both social policy and clinical interventions. Further, successful acculturation can be viewed as an indicator of positive mental health status (Berry & Kim, 1988).

However, previous research on acculturation and mental health has generated inconclusive results. For example, Fabrega (1969) reported that less acculturated immigrants tend to suffer from more psychological distress than those who are more acculturated (see also Vega, Warheit, Buhl-auth, & Meinhardt, 1984). Other studies found that immigrants who are more acculturated in the host society are often alienated from their own ethnic community (Burnam, Hough, Karno, Escobar, & Telles, 1987). These findings can be interpreted to imply that individuals who are more acculturated tend to alienate themselves from the support network of their own ethnic community and are, therefore, vulnerable to psychological disorders (Krause, Bennett, & Tran, 1989). Previous studies also support the hypothesis that immigrants who can maintain a balance between their two cultures experience fewer psychological disorders than those who are either less or highly acculturated (Buriel, 1984; Ramirez, 1984). Specific acculturation strategies have also been linked to a more positive mental health status (Berry & Sam, 1997).

Immigrants and refugees from war-torn countries or from regions with great political upheavals and economic hardships have often experienced numerous traumatic experiences before emigration. Moreover, the traumatic events often encountered by most political refugees (e.g., from Southeast Asia) during their flight for freedom have also been consistently reported. Premigration traumatic experiences, such as war, torture, death, and starvation can put immigrants and refugees at a considerable risk for social and mental health problems in a host culture. Unfortunately, many of these risk factors are beyond the preventive reach of mental health professionals or social service agencies because they often occurred in the immigrants' native homeland or during the migration period.

PSYCHOLOGICAL CONSEQUENCE OF TRAUMA EXPERIENCES

The relationship between trauma and its psychological consequences has been well established in research literature. Numerous studies of prisoners of war (POWs), combat veterans, natural disaster survivors, as well as rape and torture victims have revealed that posttraumatic stress symptoms are remarkably common among these victims (e.g., Goldfeld, Mollica, Pesavento, & Faraone, 1988). One of the most common psychiatric disorders often found among trauma survivors is posttraumatic stress disorder (PTSD) (Wilson & Keane, 1997). PTSD is characterized by a set of symptoms (or syndromes) that an individual may develop following exposure to an extremely traumatic stressor; the exposure to the traumatic events could be either direct personal experience (e.g., being raped) or vicarious, such as witnessing or hearing about the events. These symptoms often include both psychological and behavioral components (Goldfeld et al., 1988). The fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (APA, DSM-IV, 1994) lists a host of PTSD symptoms or behaviors a person may develop after being exposed to a traumatic event (or events) that involved intense fear, helplessness, or horror.

In addition to symptoms of PTSD, other studies have also reported that traumatic experiences frequently lead to a host of other psychological and behavioral symptoms, such as depression, anxiety, and alcoholism (Breslau, Davis, Andreski, & Peterson, 1991; Norris, 1992; Ursano & Rundell, 1990). Moreover, high rates of psychiatric comorbidity have been observed quite frequently among trauma survivors, particularly among individuals with PTSD (e.g., Helzer, Robins, & McEvoy, 1987). These researchers analyzed data using a community sample assessed in the Epidemiologic Catchment Area Study and found that individuals with PTSD were twice as likely as those without PTSD to suffer from some other psychological disorder. Another study using a community sample of Vietnam veterans reported that nearly 99% of those who met diagnostic criteria for PTSD qualified for one other diagnosis, including depression, dysthymia, anxiety, or substance abuse/dependency (Kulka, Schlenger, Fairbank, Hough, Jordan, Marmar, & Weiss, 1988). However, the psychological effects of traumatic events vary greatly among trauma victims. Furthermore, the intensity of impact on a person's functioning depends on many factors, including but not limited to cultural beliefs, religious beliefs, socialization experiences, available coping strategies, and available social and psychological support resources.

MENTAL HEALTH STATUS OF VIETNAMESE REFUGEES

Vietnamese refugees in the U.S. have been identified as the largest subgroup among the Southeast Asians (Office of Refugee Resettlement, 1993). As the Vietnamese-American community continues to evolve, more system-

atic research designs that examine mental health issues of this population are greatly in need. Previous studies on Vietnamese refugees typically examined three main areas, including psychological adaptation (e.g., Lin, Tazuma, & Masuda, 1979; Lin, Masuda & Tazuma, 1982); social and language adaptation (Nicassio, Solomon, Guest, & McCullough, 1992; Tran, 1988; 1990); and economic adjustment (Caplan, Whitmore, & Choy, 1989; Tran, 1992). Substantial mental health problems, such as chronic PTSD and depression, among the Vietnamese population have been reported in the United States, Canada, Norway, and Japan (Beiser, 1990; Kinzie, Boehnlein, Leung, Moore, Riley, & Smith, 1990; Kleinman, 1990; Vaglum, 1993). As with other ethnic groups of Southeast Asian refugees, mental health problems among the Vietnamese refugees were found to include anxiety, depression, intergenerational conflict, psychosomatic illness, and adjustment problems (Nguyen, 1982). Compared to other subgroups of Southeast Asian refugees, Vietnamese refugees encounter similar mental health and adjustment problems.

Vietnamese refugees who escaped from their Communist controlled country by boats between the late 1970s and the early 1980s and those newcomers who were detained in reeducation camps are the most vulnerable to psychiatric disorders. These individuals have experienced a multitude of traumas, including rape, being lost, hunger, witnessing death and/or murder of loved ones, and torture (Mollica, Wyshak, & Lavelle, 1987; U.S. Committee for Refugees, 1984). The psychiatric disorders which have been diagnosed most frequently among this specific subgroup of Vietnamese population include, but are not limited to, depression and PTSD (Kroll, Habenicht, Mackenzie, et al., 1989; Mollica, Caspi-Yavin, Bollini, Truong, Tor, & Lavelle, 1992).

RESEARCH HYPOTHESES

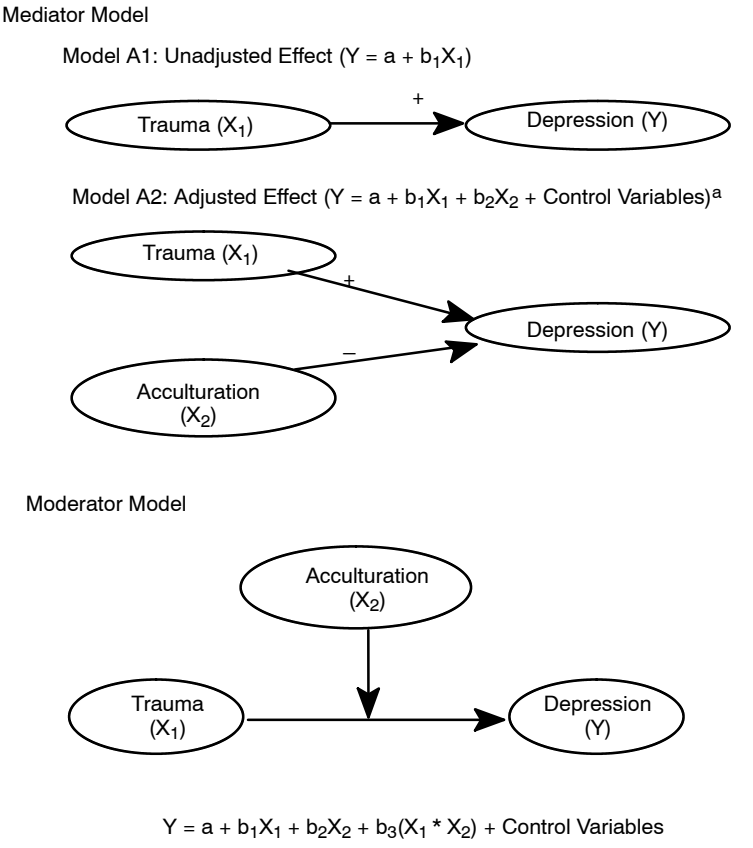
To understand the role of acculturation as a potential mediator or moderator of PTE on depression, two conceptual models are presented. Models A in Figure 1 suggest that acculturation mediates the effect of PTE on depression. In other words, PTE leads to higher feelings of depression (see Model A1), but its effect would be weaker (see Model A2) when controlling for acculturation. Model B in Figure 1 suggests that, given the effect of PTE on depression, its effect will be weaker for those individuals with higher levels of acculturation. In other words, high acculturation will moderate the negative impact of PTE on depression.

METHOD

Participants

The original sample consisted of 349 Vietnamese adults residing in a North Eastern State at the time of recruitment (summer 1996). The following selection criteria were used for participant selection: (1) 18 years of age or

FIGURE 1. Conceptual Models for Mediator and Moderator Effects.



Note. [a]Control Variables = Age, Gender, Marital Status, Education, Family Income, and Length of Residence in the U.S.

older; (2) having been resettled in the U.S. for at least one year; and (3) being proficient in the Vietnamese language. Participants were asked during the initial screening process to verify whether they met these criteria; if so, they were asked to participate. Each participant was asked during the screening phase whether she or he could read and understand written as well as spoken Vietnamese. Proficiency of Vietnamese language was determined by participants' self-acknowledgement. Both females and males were recruited using the same procedure.

In this study, a sample of 261 respondents aged 25 and older were selected for the analyses. This decision regarding age was based on the criterion that a respondent must be at least 4 years old by the end of the Vietnam War (i.e., 1975) in order to remember or feel the impact of past traumatic events. Among this selected sample, the average age was 42 years; 48% were males, and 64% were married at the time of data collection. The average number of years they had been living in the U.S. was 7 years.

Procedure

Participants were recruited primarily through Vietnamese social service agencies, outpatient health care clinics, health education programs, and from residential areas. At each of these sites, a Vietnamese liaison was recruited to assist in identifying potential participants. The inclusion criteria and other relevant information were carefully explained to the liaison at each site. Each participant was also informed about the issue of confidentiality, potential risks/benefits, and asked if they would volunteer to participate.

For those who had agreed to participate, a questionnaire in Vietnamese was either hand delivered to their home address or s/he picked one up at a recruiting site in proximity to his or her home. The questionnaire took approximately 30-45 minutes to complete. Participants were encouraged to contact the liaison or the researchers for any questions that may arise. Each participant received an incentive of $15 for his or her participation. Generally, the questionnaire was completed and returned within one to two days.

Measures

Depression. Level of depression was measured by the Vietnamese translated version of the Center for Epidemiologic Studies-Depression Scale (CES-D). The cross-cultural translation procedure requires forward and backward translation, focus groups, and expert evaluation. More importantly, this translation procedure involved an equal number of bilingual female and male translators to avoid gender-specific problems in the use of language and expression.

The CES-D is a 20-item, self-report, Likert-type rating scale. It was designed to measure the occurrence and persistence of depressive symptoms in the past week among non-clinical samples, specifically, the CES-D scale aimed at assessing ''affective component and depressed mood'' (Radloff, 1977). The CES-D scale has been translated into a number of languages and has been widely used to assess the prevalence of depressive symptomatology among non-clinical populations of different racial and ethnic groups (Roberts, 1980), including American Indian adolescents, Korean immigrants

(Noh, Avison, & Kaspar, 1992), Chinese Americans (Ying, 1988), and Caucasians and African-Americans (Radloff, 1977). The item "I felt as good as other people" was omitted from the present analyses because the research team felt that its translation did not reflect the construct of depression in the Vietnamese culture. Cronbach's alpha coefficient for the Vietnamese version used in this study was .91. Higher scores on this scale refer to higher levels of depression. Scores could range from 0 to 60.

Premigration traumatic events. Premigration traumatic experiences were measured by using a subscale of the Harvard Trauma Questionnaire (HTQ-Vietnamese version), developed by the Indochinese Psychiatry Clinic (IPC) located in Boston, Massachusetts (Mollica, Caspi-Yavin, Bollini, Truong, Tor, & Lavelle, 1991). Sixteen items assessing various traumatic experiences, from "lack of food or water" through "torture," and "rape or sexual assault" to "murder of family or friends," were used in this study. Participants were asked to indicate whether or not they had "experienced" the listed events. Each response was dichotomized as 0 (no) to 1 (yes). The index PTE has a Cronbach's alpha coefficient at .84. Higher scores in this index refer to a higher number of traumatic experiences

Acculturation. This variable is measured by six items assessing the degree to which respondents used Vietnamese or English in various social (talk to friends) and intellectual situations (thinking). Higher scores in this scale refer to higher levels of acculturation. The scale has a Cronbach's alpha at .87 (see Tran, 1993).

Control variables. The age of the participants ranged from 25 to 73 years. Gender was coded 1 for males and 0 for females. Marital status was coded 1 for currently married and 0 for all other categories. Education was measured by the total number of years respondents spent in school in Vietnam and in the U.S. Family income was coded 1 (no earned income) to 12 ($55,000 or more a year). Length of residence in the U.S. ranged from 1 year to 26 years. Table 1 presents descriptive statistics for all variables used in the analyses. Means and standard deviations are reported for all variables. However, the means of the dummy variables should be interpreted as the percent of the category coded as 1. For example, the mean of gender is .487. This value should be read as 48% of the sample were males.

RESULTS

Evaluation of the Mediator Effect

The results of the regression analysis for the mediator model are presented in Table 2. It appears that premigration traumatic experiences had a statisti-

TABLE 1. Description of Variables Used in the Analysis.

Variables	Mean	SD
Age	42.05	12.40
Gender (1 = male, 0 = female)	.49	.50
Marital Status (1 = married, 0 = other)	.64	.48
Education: Years in school (Vietnam + U.S.)	14.09	4.24
Family Income	7.34	3.38
Length of Residence in U.S. (years)	7.31	5.45
Premigration Traumatic Experiences (PTE)	4.53	4.11
Acculturation	14.28	4.58
Depression	12.23	8.12

Notes. For dummy variables (0/1), the means are percent of categories coded as 1. The range of family income is from 1 for no earned income to 12 for $55,000 and higher.

cally significant effect on depression. That is, respondents who had more traumatic experiences were more likely to suffer from higher degrees of depression (beta = .357, $p < .001$). However, acculturation did not have a statistically significant relationship with depression. In addition, acculturation improves the magnitude of the regression coefficient of PTE from .624 (see Table 2) in the unadjusted analysis to .706 in the adjusted analysis. This finding is entirely unexpected. It was expected that the adjusted regression coefficient of PTE should be smaller than its unadjusted coefficient for the mediator effect to be operating. However, given the meaningful direction of the relationship between acculturation and depression (beta = $-.107$, $p > .05$), one should not rule out the probability of a statistically significant relationship between these variables.

In the present study, it is concluded that the data do not support the mediator model of acculturation, PTE, and depression. Other control variables found to have statistically significant relationships with depression include gender, marital status, education, and family income. The findings under the mediator model in Table 2 indicate that male respondents were less depressed than their female counterparts (beta = $-.125$, $p < .05$), that married respondents were less depressed than non-married respondents (beta = $-.145$, $p < .05$), that respondents with a higher level of education were less depressed (beta = $-.124$, $p < .05$, one tailed test), and that respondents with higher family income were also less likely to be depressed (beta = $-.125$, $p < .05$, one-tailed test).

TABLE 2. Regression Analysis of Depression Under Different Conceptual Models (N = 261).

Models	Mediator Model		Moderator Model	
Coefficients	b (SE)	Beta	b (SE)	Beta
Variables				
Unadjusted				
PTE[a]	.624 (.116)***	.357		
Adjusted				
PTE[a]	.706 (.137)***	.357	1.535 (.346)***	.776
Acculturation	−.191 (.125)	−.107	.070 (.159)	.039
Age	2E-04 (.047)	3E-04	−.002 (.047)	−.004
Gender	−2.028 (.992)*	−.125	−1.928 (.981)#	−.118
Marital Status	−2.449 (1.090)*	−.145	−2.356 (1.078)*	−.139
Education	−.239 (.135)#	−.124	−.243 (.133)#	-.126
Family Income	−.300 (.173)#	−.125	−.275 (.171)	−.114
Length in US	.067 (.097)	.045	.066 (.096)	.044
PTE × Acculturation			−.057 (.022)***	−.460
R^2	.195		.216	

Notes. * p < .05; ** p < .01; *** p < 001; #p < .05 for one tailed test.
PTE[a] = Premigration Traumatic Events

Evaluation of the Moderator Effect

The primary purpose of the moderator model is the testing of the interaction effect between PTE and acculturation on depression. An interaction term between PTE and acculturation was constructed by the multiplication of these two variables. The results presented under the moderator model of Table 2 confirm a statistically significant interaction effect of PTE and acculturation on depression (beta = −.460, $p < .001$). This statistically significant interaction effect suggests that acculturation can moderate the effect of PTE on depression. The meaning of this relationship is that although PTE tends to induce higher feelings of depression, its effect is weaker among respondents with higher levels of acculturation, and stronger among less acculturated respondents.

To further illustrate the interaction effect between PTE and acculturation, the sample was divided into two groups: low and high levels of acculturation. The same regression equation examining the effect of PTE on depression was applied for both samples. The results presented in Table 3 clearly support the moderator effect of acculturation. Both the adjusted and unadjusted regression coefficients of PTE on depression between low and high acculturated respondents indicate that the impact of PTE on depression was twice greater among less acculturated respondents than among more acculturated respondents.

DISCUSSION

The main objective of this study was to understand the role of acculturation as a mechanism for coping with emotional distress. In this study, only PTE was examined in the context of acculturation and depression. Results obtained from this study suggest that acculturation does indeed moderate the degree of negative impact of PTE on levels of emotional distress among Vietnamese refugees. In other words, refugees who have higher levels of acculturation in the host society tend to experience lower levels of depression than less acculturated individuals.

A fundamental research question that remains to be examined is what motivates an immigrant or refugee to acculturate (or not acculturate) into a host society? It seems that the extent to which immigrants and refugees acculturate may be determined by various factors (Berry & Kim, 1988), including mode of acculturation (e.g., integration, assimilation, or marginalization), phase of acculturation, nature of the host society (e.g., multicultural, discrimination, social support), and characteristics of the acculturating individual (e.g., age, status, appraisal, coping, attitudes, contact, length of resi-

TABLE 3. Regression Analysis of Depression Under Low and High Acculturation Levels: Further Illustration of the Moderator Effect of Acculturation for PTE and Depression.

	Low Acculturation (n = 84)	High Acculturation (n = 177)
PTE	b (SE)	b (SE)
Unadjusted	.888 (.193)***	.452 (.142)***
Adjusted	1.076 (.219)**	.443 (.174)**

Notes. * $p < .05$;** $p < .01$; *** $p < .001$. Adjusted coefficients were controlled for age, gender, marital status, education, family income, and length in U.S.

dence). Understanding this question and the relationship among these factors may be important for social agencies and mental health professionals who have direct contact with these individuals. This effort related to facilitating acculturation can serve as a preventive measure against the negative impact of trauma on the psychological well being of these immigrants or refugees. Refugee groups are appropriate targets for prevention programs, since they come to a host country often with a massive trauma history and are at greater risk for psychopathology than the non-refugee population.

For Vietnamese refugees, interventions at the primary prevention level (group-oriented) may have a better outcome with respect to better adjustment and psychological well being than secondary (early treatment) or tertiary (rehabilitation) levels. Although Vietnamese refugees may respond more positively to primary prevention, interventions at the individual level should not be neglected. Mental health treatment of refugees presents a tremendous challenge to Western mental health professionals. There are a vast number of obstacles that could affect the quality of treatment with refugees; most notable are language barriers and cultural differences. While many refugees are not familiar with mental health services, there is a serious lack of trained indigenous mental health professionals. Furthermore, it is not yet known which treatment modalities might best fit with refugees' perceptions and attitudes toward treatment and psychopathology. Nonetheless, clinicians who work with refugees must be patient, supportive, and culturally sensitive to their religious beliefs and cultural values. For example, Buddhists believe that one's current life is a reflection of one's past life. Therefore, current adversities are believed to be the result of "bad karma," suggesting that one did not live virtuously in previous life. This religious or philosophical belief may deter the effort of an immigrant to acculturate into his/her host society. Therefore, one must accept the consequences willingly and strive to improve one's current life by performing good deeds in hope for a better life. The concept of "karma" can be summed up as follows, "if you sowed bad seeds, you will harvest bad fruits." When treating Asian-American clients, including Vietnamese, clinicians should not take such views about life as a sign of mental feebleness or pessimism. Successful treatment requires clinicians to listen empathetically and to respect the belief systems of their clients.

The understanding of refugees' past traumatic histories is important for both social services agencies and mental health professionals in helping these individuals achieve a smooth transition into mainstream society. Several considerations should be noted in the assessment of refugees' trauma. Lee and Lu (1989) suggested a framework for a thorough assessment of traumatic experiences among refugees, which includes significant events and stressors at two major stages of emigration. First, during the pre-emigration period the client should be asked about various catastrophic experiences in the country

of origin. The various types of traumatic events should include, among others, war, torture, imprisonment, assaults, famine, death, and loss of loved ones. Since the psychological effect of trauma varies from one individual to another, it is also important to ask the clients for their perceptions about the degree of life threat of the events to their personal safety. In addition, it is also critical to explore the refugees' decisions or reasons for their flight, as well as their refugee camp experiences and the nature of the legal immigration process. It should also be added that many political refugees encountered experienced horrific events (e.g., rape by sea pirates or poor sanitary condition in refugee camps) during their flight for freedom. Thus, it is critical to assess for traumatic experiences during this period.

Second, assessment of stressors among immigrants and refugees should also include stressors in the post-emigration stage, the period after resettlement in a host country. The post-emigration stressors may be related to economic, employment, sociocultural, language, family, and acculturation. As noted earlier, when assessing for trauma stressors, it would also be most helpful to assess the degree of impact the traumatic experiences have on the daily functioning of these individuals. Although this study only examined pre-migration traumatic experiences in the context of acculturation and depression, it is also important to study the role of acculturation as a mechanism for coping with post-migration stress.

This study contains several limitations, which should be mentioned. First, issues of reliability and validity are more complex in cross-cultural studies (van de Vijert & Leung, 1997). Correspondingly, such shortcomings are inevitable in this study. One item on the CES-D scale was omitted from the analyses due to the imprecise translation of that item. The Vietnamese version of the item, ''I felt that I was just as good as other people'' was translated too literally. This item appeared to suggest the overt endorsement of high self-worth, a behavior that is socially disapproved in Vietnamese culture. Accordingly, it was omitted from all analyses, leaving the CES-D scale with 19 items. While this decision may not affect the study at the conceptual level, the scale lacked the original structure. Nonetheless, the CES-D scale, with one item deleted, still served the purpose of this study. Its internal consistency reliability remained adequate.

Second, the Harvard Trauma Questionnaire (HTQ) seems to be biased against females with respect to the types of trauma events. The trauma event scale appeared to capture the life experiences of Vietnamese men more so than that of women. Many items seemed to target war trauma and reeducation camp experiences with which women lacked direct encounters. Furthermore, although the HTQ was originally designed to capture the typical traumatic experiences of Southeast-Asian refugees who presented to the Indochinese Psychiatry Clinic (Boston, MA) (Mollica et al., 1992), its cultural validation

among large community-based samples has yet to be tested. Additionally, the acculturation scale used in this study emphasized mainly language acculturation, as opposed to other behavioral components of acculturation. Future studies should employ a more comprehensive acculturation scale.

Furthermore, this study did not have the capacity to measure the duration, intensity, and severity of the impact of the trauma events. Simply asking participants to indicate whether they have experienced the listed traumatic events does not allow us to fully capture the unique life experiences of these individuals. For example, virtually all Vietnamese refugees who escaped illegally (either by land or by boat) during the late 1970s would be most likely to encounter one or more of the following events: "being close to death," "lack of shelter," "becoming lost or being kidnapped," "illness without medical care," or "death/separation from loved ones." However, the lack of information regarding the duration and the intensity of the events limits our ability to understand the impact of these traumatic experiences. For instance, what is the nature of the event "being close to death or being tortured?" With regard to the experience of "combat situations," for example, it would be helpful to know whether participants had direct experience fighting in the battle field or simply had lived through the event of war. This information will help us to better understand the nature and impact of the traumatic events experienced by the Vietnamese refugees.

The problem that is inherent in all correlational studies is the inability to determine causal relationships. Since this study is a correlational study, it cannot escape from this problem. For instance, the results did not identify the variables that directly caused depression. In addition, the possible biases resulting from the use of self-report measures should also be taken into consideration. In a self-report study, participants may over- or under-report psychological symptoms or painful experiences. Data from this study revealed that among the 16 traumatic event categories, participants endorsed the item pertaining to "rape or sexual assault" at lowest frequency. It has been reported previously that Vietnamese women who escaped during the 1970s, either by land or by sea, were at high risk for being raped by sea pirates or by land-border patrols. Perhaps such experiences were too painful to revisit or admit. Moreover, the acknowledgment of being raped would be extremely shameful in Asian cultures. For this reason, many men and women were discouraged from talking about it, thus, keeping the painful experience forever suppressed. Finally, although the sample size of this study was adequate, it may not be representative of the Vietnamese population in the U.S. The Vietnamese population in the U.S. varies tremendously in important ways, such as emigration experiences, age, and level of acculturation and education. Thus, generalization would have to be made very carefully.

Future studies should aim at improving the appropriateness of assessment techniques with Vietnamese refugees who may have different attitudes toward the experience and acknowledgment of depressive symptoms. Since the Vietnamese population living in the U.S. varies immensely in terms of life and emigration experiences, future research should attempt to identify these subgroups for the purpose of comparison. It is crucially important not to treat the Vietnamese Americans as a homogenous group. These goals may illuminate our understanding of the unique life experiences and the effects of their life vicissitudes.

CONCLUSION

In summary, findings from this study indicate that acculturation moderates the impact of traumatic experiences on psychological well being of refugees. These findings suggest important implications for both social services agencies and mental health professionals. If successful adjustment in a host society reduces the negative impact of past trauma history on mental health, then primary prevention programs should receive priority to assist refugees in achieving smooth transition into a host country and in coping with past traumatic experiences. Although it is important to examine the direct effect of acculturation on depression, it is more theoretically and clinically meaningful to examine acculturation in the context of being a coping mechanism. The evaluation of two competing conceptual models of acculturation, PTE and depression, in this study suggest that researchers, human service agencies, and mental health professionals should reexamine the role of acculturation in the process of adjustment and adaptation among newly arrived immigrants and refugees. Moreover, acculturation should be examined using more comprehensive theoretical models for both research and intervention purposes.

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