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GENERATIONAL DIFFERENCES IN PSYCHOSOCIAL ADAPTATION AND PREDICTORS OF PSYCHOLOGICAL DISTRESS IN A POPULATION OF RECENT VIETNAMESE IMMIGRANTS

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ABSTRACT: While first-wave Vietnamese immigrants adapted well to life in the United States, subsequent immigrants have had greater adjustment difficulties, including more evidence of psychological distress. This study aimed to analyze psychosocial adaptation differences among three generations of recent Vietnamese immigrants, as well as to examine predictors of mental distress in the sample as a whole. A community sample of 184 recent Vietnamese immigrants, categorized as either elderly, middle-aged, or young adults, was assessed for levels of psychological distress, including depression, anxiety, and PTSD, as well as family conflict, dissatisfaction with life in the U.S., acculturation and biculturalism, social support, coping, and premigratory stressors. Young Vietnamese adults were most acculturated, most bicultural, and reported themselves as healthiest and least depressed. They were most often working, least often on welfare, and had the highest family income. However, they also reported most dissatisfaction with their current lives in the U.S. and most family conflict. Regression analysis explaining approximately one-quarter of the variance in mental distress implicated current dissatisfaction with and lack of adjustment to life in the United States, as well as greater acculturation and increased family conflict. Although young adults scored significantly higher than other generations on most of the risk factors for psychological distress, they appeared to be buffered against poorer mental health outcomes by factors of generation and perceived positive overall well-being. In terms of testing a predictive model of psychological dis-

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tress, this study found current adjustment factors significantly more important in determining mental health outcomes than premigratory stressors such as war-related traumas.

INTRODUCTION

With the fall of Saigon in 1975, almost 125,000 Vietnamese refugees fled to the United States.[1] This "first wave" of Vietnamese immigrants was comprised of individuals and their families who were often well-educated and had played prominent roles in the government of South Vietnam, or had served in its army. A "second wave" of refugee immigration from Vietnam occurred in the late 1970s and early 1980s, as more than 200,000 "boat people" risked their lives to escape an oppressive Communist regime. As relations between Vietnam and the United States became increasingly normalized, and restrictions on emigration eased, the orderly departure program was introduced, followed by the humanitarian reunification program, allowing families separated during the first two immigration waves to be reunited.

Historical theory identifies several kinds of migration:[2] 1) Primitive migration, which is neither forced nor planned, but where people judge the political or economic situations in their country or residence to be unbearable and flee. The Irish emigration primarily to the U.S. and Canada in the 1840s as a result of the potato famine is one historical example. 2) Forced migration, such as the deportation of British convicts to Australia between 1788 and 1867, or the slave trade in the 18th and 19th centuries to the Americas, is compelled migration inflicted upon unwilling populations. 3) Free migration, characteristic of the initial phase of the 19th century Atlantic migration, is generally small in numbers, as individuals motivated not by push factors or political forces, but by alienation from their society of origin, choose to make a new life for themselves. 4) In contrast to free migration, mass migration involves the movement of large numbers of individuals. The largest of these intercontinental movements, the Great Atlantic Migration, accounted for the movement of 40 million people between 1820 and the mid 20th century.

Migration patterns are characterized by either push or pull forces, or a combination of the two. Examples of a pull force are better economic and educational opportunities, or greater political or religious freedoms. Examples of push forces are fear of political, religious or other persecutions, including survival fears. Immigration and its attendant acculturation challenges inevitably produce certain psychological sequelae, such as

homesickness, uprootedness, isolation from and mistrust of the majority culture,[3] mood disturbance,[4] and psychosomatic illness.[5]

The psychological impact of pull vs. push migrations is fundamentally distinct.[6] Immigrants with "pull" motivation, although they may have strong ties to their country of origin, are usually not satisfied there, and perceive themselves as making a free-will choice in emigrating. Often these individuals are hardier and more enterprising than the average. Push immigrants, on the other hand, feel forced from their homeland, are not necessarily attracted to their new country, and may experience greater homesickness and adjustment difficulties. These immigrants are often labeled refugees, a distinct "social psychological type whose behavior is socially patterned,"[7] who are highly stressed and traumatized.[8] Studies since World War II have recorded a unique psychological aftermath among refugees, prisoners of war, and concentration camp survivors, characterized by high prevalence of chronic depressive, anxiety, and somatic symptoms.[9]

In terms of their psychological attitudes, the Vietnamese immigrants included in this study fall somewhere between free and primitive migration. Because the vast majority of the study subjects are recent immigrants, coming to the U.S. long after the brunt of punitive retaliatory measures taken by the victorious North Vietnamese, in general they were not fleeing for their lives. Also, many had the "pull" of being reunited with family members whom they had not seen for years, sometimes for decades. However, this group tended not so much to be drawn to the United States for its opportunities as feeling compelled to leave a situation which they felt held no hope for a secure or prosperous future.[10] Thus psychologically these immigrants perceived they had little choice in emigrating to the United States. Further, most of our subjects had experienced massive disruption and trauma in their country of origin, including losing family members to war and being interned in a prison or refugee camps. Finally, in terms of the young adult generation, this group was generally characterized by an element of "forced immigration" in that it was parents or older family members who made the actual decision to emigrate.

Recent Vietnamese immigrants are often perceived as having significant psychosocial adjustment problems to life in the United States, as well as increased psychological distress. In particular, elderly immigrants encounter obstacles in mastering daily living skills such as language acquisition and new social customs.[11] Middle-aged individuals experienced the brunt of trauma related to the Vietnam War, such as participation in the actual conflict, often followed by imprisonment in "re-education" camps, as well as lengthy separation from family.[12] Young adults, caught between two cultures, experience chronic cultural conflict.[13,14] The purpose of this

study was to investigate psychosocial adaptation among these three generations of Vietnamese immigrants, as well as to identify predictors of psychological distress in the sample as a whole.

While in some respects the Vietnamese population has adapted surprisingly well overall to life in the United States,[15] it is also a community with high rates of depression, anxiety, post-traumatic stress disorder (PTSD), and somatic symptomatology. The reasons for these problems are multifaceted, and include such factors as war-related trauma, enforced separation from loved ones, low level of available social support, acculturation difficulties, and lower educational and socioeconomic status.

Because of the massive size of Vietnamese migration after the war, wide dispersal of refugees occurred, primarily to the United States and Canada, but also to countries as diverse as Australia, Norway, France, and Finland. Interestingly, most of these countries report similar psychological difficulties among their Vietnamese immigrant populations, as is suggested below.

According to several studies,[10,16–18] Asian-American refugees have particularly high levels of mental disturbance. A community sample of 209 newly arrived adult Vietnamese refugees screened by a Vietnamese psychiatrist using the Structured Clinical Interview for DSM-IIIR (SCID)[19] showed 5.5% with major depression, 8.5% with adjustment disorder, 3% with dysthymia, 3.5% with PTSD, and 3% with Generalized Anxiety Disorder (GAD).[20] Another community sample of Vietnamese in Norway showed no decline in psychological distress after three years of residence compared to an initial screening. Almost one in four suffered from a psychiatric disorder, and the prevalence of depression was 17.7%.[21] A study that utilized a community sample of 280 Vietnamese refugees who had resettled in Finland found overall anxiety rates of 18.3% and depression rates of 15%, with adult prevalence somewhat higher.[17] A study of New Zealand Vietnamese refugees indicated rates of 15% for anxiety and 29% for depression.[22] Community studies in the United States indicate a 4.7% prevalence rate of PTSD.[23] One study of a community cohort of 145 Vietnamese boat refugees in Norway estimated 10% with PTSD.[24] A study of 460 Vietnamese living in Orange County, California (the same geographic community as the present study) showed fully 35% experiencing PTSD symptoms.[25]

A unique feature of this investigation was our focus on three generational groups. We wanted to examine psychological adjustment in three different generations because of other cross-cultural research suggesting that differential adaptation occurs in part as a function of age. We did not have a specific hypothesis regarding differences in generational adaptation because of the paucity of empirical research addressing this issue. How-

ever, the present study was designed to address the following research questions: 1. Are there differences in adjustment to life in the U.S. among young adult Vietnamese, middle-aged, and elderly generations? 2. Are there mental health differences among the three generations?

Based on previous literature examining relationships between pre-migratory (war-related) stress,[1,21,24] acculturation,[26,27] perception of overall health status,[13,28,29] family factors[14,30] and social support[31] to psychological distress, we tested a theoretical model asserting that all of the above variables would make significant contributions to psychological dysfunction in a community sample of recent Vietnamese immigrants. We hypothesized that psychological dysfunction would be positively associated with war-related trauma and current adjustment difficulties and negatively associated with coping, perceived overall good health, and presence of social support. We hypothesized further that current adjustment difficulties, rather than past war-related trauma, would explain more of the variance in mental distress. For the purposes of this study, we used a model of current overall adjustment that included assessment of perceived individual well being, individual satisfaction/dissatisfaction with life in the U.S., family harmony / conflict, and presence/absence of social supoort,[32] as well as acculturative skill acquisition, such as language use, media preferences and social interactions.

Following previous research we also examined the relationships between demographic variables (including age,[31] gender, years of school,[32] income, years in the U.S., marital status,[1,33,34] employment status, and government assistance[21,29]), and psychological adaptation as measured by levels of depression, anxiety, and PTSD. We hypothesized that SES, educational level and age would be inversely related to psychological distress; whereas government assistance and female gender would be significant predictors of depression and anxiety. Because of contradictory findings regarding marital status and psychological distress, we had no hypotheses regarding the direction of this relationship.

METHODS

Subjects

Subjects were 215 men and women from five English as a Second Language (ESL) classes in Orange County, California, who listened to a presentation of the study by teams of bilingual Vietnamese-American college students.

Although this method of recruitment might have introduced a selection bias in our sample, in that ESL attendees might be more motivated to acculturate than immigrants in general, we were told by leaders in the Vietnamese community that 75–80% of immigrants of a similar socioeconomic stratum as our subjects attend an ESL class within the first five years after emigration (Mai Cong, Director, Vietnamese Community Center, Orange County, CA, 1996).

One hundred and eighty four or 85.5% agreed to participate. Subjects were recruited to represent three generations: 1) "Elderly," aged 60+ 2) "Middle-aged," aged 40–59 and 3) "Young adults," aged 18–23. The use of an age-stratified sample was a reflection of our intent to investigate mental health differences among these distinct generations. We instituted a 17-year age gap between the first two groups in order to clearly differentiate between the generations of interest. Because of this design, consecutive subjects were recruited until each of six cells (generation group x gender) had a minimum of 30 subjects. The resulting stratified sample reflects the composition of the most recent wave of Vietnamese immigrants in each age group within the community.

Interviewing

A team of six Vietnamese-American undergraduate students was trained by the authors. All of these individuals were bilingual in Vietnamese and English. Training consisted of learning how to present the project to ESL instructors, how to summarize the project for prospective subjects, and how to interview subjects in either Vietnamese or English, depending on their preference.

Measures

A 224-item interview schedule was constructed which included all demographic data as well as the scales referred to below. Four measures assessed our dependent variable of psychological distress: We used the Vietnamese version of the Hopkins Symptom Checklist (HSCL-25),[35] including a 15-item depression scale and a 10-item anxiety scale, which has been validated in previous research with Vietnamese immigrant populations and found to have acceptably high levels of sensitivity and specificity. In the HCSL-25, each item is scored ordinally along four category responses ranging from no symptoms to extreme symptoms. An increase in total score indicates an intensification of symptoms. Responses are summed and divided by the number of answered items. A score of 1.75 was designated by the developers of the instrument as a positive cutoff point

both for depression and for anxiety. In this sample, the HSCL-Depression and the HSCL-Anxiety both had an internal consistency reliability of .90.

Also used was the Vietnamese Depression Scale (VDS), an 18-item instrument developed specifically to measure depression in Vietnamese immigrant refugee populations.[36,37] The VDS has six questions each about physical, psychological, and culture-specific symptoms of depression. A threshold score of 13 or above is an indication of likely depression. The VDS has been shown to have acceptable sensitivity and specificity. In this study, the VDS had an internal consistency reliability of .85.

Based on the questionnaire items, several additional scales were also constructed. A 14 item scale was constructed to assess PTSD in respondents. Because it is more difficult to validate PTSD in Vietnamese than in other Southeast Asian (SEA) groups,[38] it was decided not to use an existing measure, but to develop our own assessment tool. Our final scale included items found in other measures of PTSD (i.e., "Currently having nightmares?"; "Feel suspicious/mistrustful of people"; "Persistently angry"),[24,39,40] as well as questions on survival guilt and sense of purposelessness suggested to us by experts in the Vietnamese community ("Fear of torture/imprisonment"; "Feel guilty you survived"; "Feel there is no purpose to your life now"). The internal consistency reliability of this measure was .87.

Because of documented tendencies within the Vietnamese population to somatize psychological issues,[41] we measured perceptions of individual well-being through a single item rating overall health on a Likert-type scale. Previous research has shown a high correlation between such a question and more objective, elaborate measures of health,[42] as well as with measures of psychological distress.[43,44]

A Family Conflict scale was also constructed, which we conceived of as measuring the family dimension of adjustment difficulties. This 12 item scale assessed the frequency of conflict within the respondent's family, and had an alpha coefficient of .86. The scale queried respondents about potential parent-child conflicts in such areas as acculturation, hard work, parental leniency, child independence, house rules, and the importance of returning to Vietnam. These represent typical areas measured in other studies of conflict in immigrant and ethnic families.[14,45]

Our measure of societal adaptation difficulties was the Dissatisfaction scale, a 13 item scale assessing levels of concern and disappointment with life in the U.S. This scale had an alpha coefficient of .81. Representative questions asked whether subjects felt they were discriminated against in the U.S., felt they did not belong in the U.S., feared violence and gangs, had problems understanding this country, were unhappy with their life in the U.S., were discouraged about their future in the U.S. and longed to

return to their homeland. These items are typical of those found in other studies of immigrant populations measuring current dissatisfaction.[46]

Acquisition of acculturative skills was measured through a 10 item translated version of the Marin acculturation scale,[47] a scale primarily of language usage and social relations. Items included questions such as "What language do you read/speak?"; "What language do you watch television in?"; "Your close friends are . . ." and "You prefer social gatherings with people who are . . ." The scale's internal consistency reliability achieved in this study was .76. We also attempted to measure the construct of biculturalism, i.e., positive endorsement of values characteristic of both cultures of interest, and familiarity with social rules etc. in both cultures. This 6-item scale had an internal consistency reliability of .70, and was based on positive endorsement of items such as "Children should always know about Vietnamese culture"; "I am knowledgeable about Vietnamese customs and traditions"; "I know how to solve problems in the US"; "I understand most US customs and rules."

Following our proposed model, we measured two other variables which we hypothesized would exert an influence on mental health outcomes: social support and premigratory stressors (i.e., war-related traumas). Social support was measured through a 16 item scale assessing the availability of both instrumental and emotional support in the respondent's life (alpha = .95). Typical questions included "Do you have someone to take you to the doctor if you needed it?" "Do you have someone who can give you information to help you understand a situation?" "Do you have someone to share your worries and fears with?"

Finally, premigratory stressors were assessed through the Trauma Scale, a measure of the amount of war and post-war-related trauma the respondent had experienced, including serving in the army, losing family members in the war, time in a reeducation camp (by self and/or relatives), mental and physical torture (of self and/or relatives), and nature of the emigration experience (forced flight or orderly departure). Items were derived from The Harvard Trauma Questionnaire,[48] a 47-item instrument with sensitivity of 78% and specificity of 65%. This 8 item scale had an alpha coefficient of .71.

RESULTS

Of the final sample, males were slightly over-represented (see Table 1). All subjects had been born in Vietnam, and over three-quarters had

TABLE 1

Description of Sample

Total N = 184	
Gender	54.9% Male
Age	$\bar{x}$ = 45.5 s.d. = 19.1
18–23	30%
40–59	40%
60+	30%
Place of Birth	
Urban Vietnam	77.2%
Rural Vietnam	22.8%
Education	$\bar{x}$ = 11.4 years (s.d. = 3.70)
Religion	
Buddhist	51.1%
Catholic, other Christian	43.5%
Years in United States	
1 or less	54.2%
2–3 years	28.5%
4–5 years	10.0%
6+ years	7.3%
Currently Working	16.8%
Currently on Government Assistance	69.7%
Estimated monthly family income	
$1,500 or less	85.5%
Married	62.5%

been born in urban areas, primarily Saigon. Our sample was well educated, and almost evenly divided between Buddhists and Christians. Sixty-three percent of the sample was married. Almost 83% of study respondents had been in the U.S. three years or less, with 54.2% having been in this country one year or less. Ninety-one percent had family members still living in Vietnam.

The vast majority of the sample were not employed. Of those who were working, most (68.2%) were employed in blue collar jobs. Almost 70% of the sample was receiving some form of government assistance. The vast majority reported a family monthly income of $1500 or less, with 63.8% having a monthly income of between $500 and $1,000. The majority of the sample (65.2%) reported their health as poor or fair.

Generational Differences (see Table 2). Using one-way ANOVAs and Chi Square tests as the methods of analysis, we first examined possible generational differences on all variables within our sample.

1) Demographic variables. Although they had been in the U.S. significantly fewer years than the oldest generation, the "young adult" group reported the highest family income, were significantly more likely to be employed than either of the other two groups, were significantly less likely to be receiving any form of government assistance, and had received more education than the oldest group. Significantly more young adults reported

TABLE 2

Generational Differences

Category Variable		*Age* *8–3*	*40–9*	*60+*	*Chi-Square*	*D.F.*
Demographic						
Working****	Yes	34.5%	9.7%	1.8%	25.78	2,182
	No	65.5%	90.3%	98.2%		
Government	Yes	49.1%	81.7%	74.1%	16.01	2,178
Assistance***	No	50.9%	18.3%	25.9%		
Married****	Yes	22.6%	97.2%	61.8%	68.69	2,179
	No	77.4%	2.8%	38.2%		
Health****	Yes	74.5%	24.3%	9.1%	57.91	2,184
	No	25.5%	75.7%	90.9%		
Years in U.S.*** x̄	(s.d.)	1.3 (1.2)	1.8 (1.7)	3.6 (2.6)	23.1	2,174
Years/School**		12.0(2.5)	12.0(3.8)	10.0(4.3)	4.6	2,150
Family Income # *		2.8 (1.3)	2.2 (1.0)	2.3 (1.4)	3.7	2,135
Psychosocial						
Acculturation ***		2.0(.37)	1.7(.40)	1.6(.43)	11.7	2,178
Biculturalism **		2.2(.16)	.14(.14)	.13(.14)	6.5	2,178
Trauma***		4.4(1.9)	2.8(1.6)	3.6(2.1)	13.0	2,181
Depression**		3.7(3.4)	5.3(4.4)	6.6(5.8)	5.3	2,181
Dissatisfaction *		45.4(7.3)	43.1(8.9)	41.2(9.4)	3.35	2,181
Family Conflict**		25.9(5.7)	23.8(8.2)	21.5(7.8)	4.8	2,181

# Reported are ordinal categories of monthly income:
1 = $0–499
2 = $500–999
3 = $1000–1499
4 = $1500–2000

*p<.05 **p≤.01 ***p≤ .001 ****p<.001

being in good to excellent health than did respondents in the other two groups, and significantly fewer had experienced any war-related traumas.

2) Psychosocial variables. Young adults reported significantly greater acculturation and more biculturalism than either middle-aged or elderly subjects. Further, the young generation was significantly less depressed on the Vietnamese Depression Scale than the oldest(but not the middle-aged) generation, although there were no differences among generations on either the HSCL-Depression or the HSCL-Anxiety scales, nor were there significant differences in PTSD symptoms. The younger generation had more dissatisfaction with life in the United States than did either the 60+ or the middle-aged groups, and also reported significantly more family conflict than the other two groups. The three generations did not differ in terms of perceived social support.

Mental Health Variables. Mental health outcomes were moderately to highly intercorrelated (range of r values .52 (PTSD & HSCL-Anxiety) -.74 (VDL—Depression & HSCL-Depression). For the VDS, the total group mean fell well below the suggested cut-off score of 11 for community samples, and no generational group mean fell above this cut-off. Young adults scored significantly lower than the elderly group ($F = 5.31$, $p = .006$). Interestingly, there were no gender differences on this depression measure.

The overall group means for the Hopkins Depression Scale and for the Hopkins Anxiety Scale fell slightly below the cut-off score (1.75) for clinical pathology. However, depending on the age group, between one-quarter and one-third of the sample scored above the recommended cut-off scores for both HSCL-Depression and Anxiety (see Table 3). There were no significant generational differences on either of these scales, although young adults tended to score slightly lower than the other two groups. Women reported themselves as being significantly more anxious than men ($p = .04$), but no gender differences on the depression scale were detected.

Because of the post-hoc construction of the PTSD scale, it was not possible to make normative comparisons. Contrary to expectations, there were no generational differences on the measure of PTSD, although the middle-aged group tended to report more PTSD symptoms ($p = .08$). Another unexpected finding was that young adult women scored significantly higher than older women and young adult men on this measure, and had scores approximating those of elderly males (2-way interaction of generation and gender, $F = 4.9$, $p = .009$), although still somewhat lower than middle-aged males.

Multiple Regression Analysis. Because of the intercorrelations among

TABLE 3

Mental Health Variables—Descriptive Statistics

	Overall Gp		*18–23*			*40–59*			*60 +*			*Men*			*Women*		
	$\bar{x}$	*s.d.*	$\bar{x}$	*s.d.*	% > *Cut off*	$\bar{x}$	*s.d.*	% > *Cut off*	$\bar{x}$	*s.d.*	% > *Cut off*	$\bar{x}$	*s.d.*	% > *Cut off*	$\bar{x}$	*s.d.*	% > *Cut off*
VDS	5.21	4.74	3.73	3.40	1.9	5.28	4.42	9.5	6.60	5.82	18.2	4.76	4.63	8.9	4.63	4.83	12
HCLS-D	1.62	.48	1.56	.38	25.5	1.63	.39	31.1	1.67	.57	32.7	1.60	.43	29.7	1.65	.47	30.1
HCLS-A	1.63	.53	1.56	.44	27.3	1.63	.48	40.5	1.71	.66	34.5	1.56	.48	35	1.72	.58	37.3
PTSD	29.26	8.79	26.77	7.01	—	30.00	7.95	—	27.41	10.96	—	27.06	7.9	—	38.67	9.3	—

the study's mental health variables, we factor analyzed these four scales using a principal components analysis. This produced a single factor with an eigen value of 2.93 that explained 73.1% of the variance. Factor loadings (all exceeding .78) were applied to the original scale scores to create factor scores. These factor scores, referred to hereafter as Mental Distress, served as the dependent variable for the regression analysis.

The new Mental Distress variable was then correlated with the independent variables of interest, including demographic variables of subject age, marital status, sex, years in school, religion and length of time in the U.S. None of these variables had a significant correlation with respondents' mental distress. However, a dummy variable of generation indicated that being a young adult was very slightly correlated with improved mental health ($r = -.14$, $p = .05$). In additional bivariate analyses, Mental Distress was negatively correlated with health ($r = -.16$. $p = .03$), and currently having social support ($r = -.15$, $p = .05$), and positively correlated with greater dissatisfaction with life in the U.S. ($r = .31$, $p = .000$), family conflict ($r = .27$, $p = .000$), , as well as having experienced war trauma ($r = .18$, $p = .01$) and marginally with acculturation skills ($r = .14$, $p = .06$). There was no correlation between Mental Distress and biculturalism (see Table 4).

A single stepwise regression was performed that explained 24.3% of the variance in Mental Distress ($F = 11.25$, $p = .000$). Using Mental Distress as the dependent variable, we entered the following variables: War-related trauma, two dummy variables representing the two oldest generations and the younger generation, social support, dissatisfaction with life in the U.S., family conflict, acculturation, and health. The largest contributor to psychological distress was dissatisfaction with current life in the U.S., but young adult generation, family conflict, poorer perceptions of personal health and having acquired more acculturative skills all also made signifi-

TABLE 4

Bivariate Correlations of Mental Distress

Health: −.16(p = .03)
Acculturation: .14 (p = .06)
Family Conflict: .27 (p = .000)
Social Support: −.15(p = .05)
Dissatisfaction: .31(p = .000)
War Trauma: .18 (p = .01)

No significant correlations with demographic variables, including age, marital status, sex, education, income, religion, or years in U.S.

TABLE 5

Stepwise Regression Analysis of Mental Distress

Variable	*Beta*	*T*	*Sg T*
Health	.17	2.4	.02
Young Adult Generation	−.22	−2.7	.01
Acculturation	.24	3.3	.001
Dissatisfaction	.32	4.6	.000
Conflict	.18	2.6	.01

R^2 = .24, F = 11.25, p = .000, df= 5,180

cant independent contributions, while younger generation contributed a small protective factor, as seen by the negative beta value (see Table 5). War Trauma , Social Support, and the dummy variable of Older Generations did not enter into the equation when the entry criterion was set at p = .05.

DISCUSSION

In terms of the study's research questions regarding adjustment and psychological generational differences, the younger generation in some respects appeared to be adapting better to life in the U.S. than the other two older generations. This group was the most acculturated in terms of language and social proficiency, was most bicultural, was most often working and least often on welfare, had the highest family income, and reported themselves as healthiest and (at least according to the VDS) less depressed than the older generation. However, compared to a similar population of young Vietnamese immigrants, the mean VDS score in this study for this younger generation was almost double that reported in an earlier study.[49] Compared to a sample of Vietnamese Amerasian young adults, a group known for its high levels of maladjustment, the scores of young adults in this study on HCSL depression and anxiety measures fell toward the high end of the sample,[34] and closer to a physically and sexually abused sample.[50] Since our study did not ask about sexual and physical abuse, we cannot determine whether abuse was a factor in producing the relatively high rates of anxiety and depression in our young adult sample. However, comparative data from another study[51] suggest that our young

adults were more anxious and more depressed according to HCSL scores, although less depressed according to the VDS.

Further findings of this study are also a source of concern regarding the young adult generation. This group reported *most* dissatisfaction with their current lives in the U.S as well as most family conflict, both of which were predictors of mental distress in the regression analysis. Secondly, as other studies suggest,[27] the higher levels of acculturation characteristic of this young adult sample were associated with poorer mental health outcomes, against which their greater biculturalism did not appear to provide a buffer. Third, and contrary to prediction, PTSD symptoms were not significantly lower in the young adults compared to the other two generational groups. In particular, young adult women in our sample reported symptoms at a level only slightly lower than middle-aged males, and higher than elderly males, young adult males and women in both other age groups. Some studies do show higher PTSD symptoms among women than among men,[39] as well as moderate to severe PTSD symptoms among Vietnamese refugee students.[27]

A detailed examination of the PTSD scores in this sample indicated that middle-aged males tended to score significantly higher on persistent anger ($X^2 = 8.06$, df = 2, $p = .02$), difficulty relating to others ($p = .02$), having nightmares ($X^2 = 32.51$, df = 2, $p = .000$), sleep problems ($X^2 = 9.34$, df = 2, $p = .01$), reliving traumatic experiences from Vietnam ($X^2 = 9.15$, df = 2, $p = .01$), and fearing torture or imprisonment currently ($X^2 = 22.78$, df = 2, $p = .00001$), which might be considered symptoms more closely related to DSM-IV criteria for PTSD. Young women tended to score higher on items indicating general malaise and demoralization such as feeling no purpose to life, feeling problems are one's own fault, feeling bored or apathetic, and being uncomfortable in crowds. Thus young women may have experienced high levels of general distress, but middle-aged males appeared more likely to report classic symptoms of PTSD,[52]

Young adults scored significantly higher on most of the risk factors identified in this study for increasing the likelihood of psychological distress, including greater dissatisfaction with life in the U.S., more family conflict, and greater acquisition of acculturative skills. Yet younger generation was slightly, but significantly, associated with better mental health. What might have protected these young adults from poorer mental health outcomes? Although they were also more bicultural than the other two generations, biculturalism per se had no relationship to any of the mental health variables. And while social support had a small positive correlation with the study's main outcome variable, these young adults did not report greater social support than did the other generations studied. One can

speculate, however, that youth per se, as well as their overall sense of better well-being (reflected in ratings of perceived health) provided an important buffer to mental distress.

As a whole, the study sample showed no evidence of serious psychopathology, but nevertheless manifested troubling signs of significant depressive and anxious symptomatology. While neither the group as a whole nor any subgroup fell above screening cut-offs for anxiety or depression, mean scores for the HSCL-25 tended to be higher than those reported in other studies, although VDS scores tended to be similar or lower. For example, the overall group means in this study for HCSL-25 depression and anxiety were higher than for a sample of Vietnamese psychiatric patients before treatment.[53] The group mean for anxiety in our study was also somewhat higher than means found in two studies of a comparable group of New Zealand Vietnamese refugees,[22,54] although the HSCL-Depression score in our study was virtually identical. Our sample was more than twice as likely to be anxious as subjects in those studies, but about as depressed. Compared to a Norwegian study, a similar number of women were depressed, but significantly more men were depressed.[21] Significantly more subjects of both genders were anxious in our study. Compared to a Finnish study, slightly more middle-aged men and women in our study were anxious and depressed, but young adults were twice as likely to be depressed, and three times more likely to be anxious.[17]

Through regression analysis, we tested the study hypothesis regarding the relative contributions of current adjustment and past war-related trauma, and were able to explain approximately one-quarter of the variance. This suggests that other significant factors remain to be discovered. However, it is instructive to compare this regression model to other previously published models. For example, both Tran[26] and Liebkind[17] concluded that premigratory stressors (i.e., war-related trauma), while contributory to psychological distress, have a less powerful effect than do current acculturative stressors. In our study, war–related traumas, while demonstrating a small bivariate correlation with both the four separate mental health measures and with the factor-analyzed Mental Distress variable, did not enter into the regression equation at all. Similarly, in bivariate analysis, although social support appeared to mitigate the severity of mental health symptoms, the association was not robust (a finding consistent with existing literature[21]) and disappeared entirely in the regression analysis. It is possible that the small amount of variance in this variable contributed to this nonsignificant finding.

Tran's study[26] found a strong direct effect for Personal Efficacy in relation to mental health outcomes. The variable in this study that

appeared most closely related to personal efficacy was Health, which appeared to measure an overall sense of positive well-being. Perceptions of individual health did make a significant contribution to the regression model, suggesting that positive self-assessment may play a role in attenuating mental distress.

The single most important contributor to mental distress in this sample was respondent current dissatisfaction with and lack of adjustment to life in the United States. Interestingly, there was no correlation between the acculturation scale and the dissatisfaction scale, suggesting that acculturative processes in and of themselves did not enhance more general adaptation to American society. In fact, acquisition of acculturative skills, such as comfort with English or ability to socialize with non-Vietnamese, was actually associated with greater psychological distress.

Limitations of this study included reliance on a sample recruited from ESL classes, which represents more recent Vietnamese immigrants, convenience sampling which also limits generalizability in contrast to a true random sample, and different methods of questionnaire administration (i.e., verbal and written), which may have produced artifactual variances in response. Further, the omission of subjects 24–39, although a conscious study strategy designed to replicate “young adult”, “middle-aged” and “older” generations, may have skewed the data set. Despite these caveats, the conclusions of the study are still worthy of note.

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