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## Gender and Ethnic Differences in Psychosocial Stress and Generalized Distress Among Hispanics<sup>1</sup>

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*This study examined the relationship between gender, ethnicity, psychosocial stress and generalized distress in 593 Hispanic immigrants, Mexican Americans, and Anglo Americans using the Hispanic Stress Inventory (HSI) and the Center for Epidemiologic Studies Depression Scale (CES-D). Findings revealed that immigrant females had higher scores on the Cultural/Family Conflict sub-scale of the HSI and on the CES-D than immigrant males. Also, higher levels of generalized distress and psychosocial stress associated with the immigration process were found among immigrants from Central America when compared with Mexican immigrants. Central Americans' stress appraisal ratings on specific HSI items related to pre-migration trauma were significantly higher than the ratings of Mexican immigrants. Our findings indicate that research and clinical service delivery models must be sensitive to the vast heterogeneity within the Hispanic population with respect to differences in the experiences of psychosocial stress as related to gender and ethnicity.*

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The impact of stress on the individual is manifested in both psychological disturbances such as depression and physical ailments like cardiovascular disease (Cleary, 1987). Psychosocial stress and its psychological concomitants have consistently been found to have differential effects on the lives of men and women (Weissman and Klerman, 1985; Gove & Tudor, 1973; Cleary, 1987). The research literature in this area suggests that overall, women are more likely than men to suffer from affective disorders such as anxiety and depression. Several explanations have been advanced that include among others: female biological susceptibility; conflicting sex role expectations; lack of an adequate social support networks; and lack of control over their environment. Stratification on the sexes and subsequent sex role expectations, demands, interrole conflict, and the experience that women have within work and family have been identified as the potential factors that generate the most stressful experiences for women (Pearlin, 1975; Aneshensel, 1986; Aneshensel & Pearlin, 1987). More specifically, family and work roles among women seem to explain sex differences in stress (Gove, 1972; Pearlin, 1975; Aneshensel & Pearlin, 1987; Barnett & Baruch, 1985).

In the general literature on cross-cultural mental health, migration in and of itself has been identified as a source of stress for the individual (e.g., Cohen, 1987; Cervantes, Padilla, & Salgado de Snyder, 1989). Numerous studies with Hispanic immigrants have consistently revealed a positive relationship between immigrant status and mental health indicators such as depressive symptomatology (e.g., Vega, Warheit, & Meindhart, 1985). The relationship between these variables has been reported to be even stronger among adult female Mexican immigrants than for the general U.S. population and other U.S. Hispanics (Vega, Kolody, Valle, & Hough, 1986; Salgado de Snyder, 1987; Golding & Karno, 1988).

The process of adult migration to the U.S. among Latin American immigrant women involves breaking life-long ties with family members, friends, community, and cultural patterns of behavior. At the same time, there are issues related to becoming familiar with new surroundings and a new culture and language. It has been suggested that stress associated with the process of adaptation to a new culture places the individual in a vulnerable position for the development of psychopathology (Vega et al., 1985). Considering immigrants from Latin America little is known about the nature and content of specific areas of conflict in their daily life (e.g., family life, job discrimination, etc.) and the impact of such psychosocial stressors on their mental health status.

Because of its geographical location, California is the port of entry of most immigrants from Latin America. The largest concentration of these immigrants to California is comprised of Mexicans and Central Americans (Hayes-Bautista, Schink, & Chapa, 1988). These immigrants while sharing a number of important characteristics, differ significantly in their life con-

ditions and experiences prior to migration. For instance, Central American immigrants are likely to have been exposed to violence, political turmoil, and war-like conditions in their countries (Cervantes, Salgado de Snyder, & Padilla, 1989). Further, because of their traumatic experiences, some Central Americans are considered involuntary immigrants and may also hold a refugee status. Mexican immigrants, on the other hand, tend to migrate to the U.S. voluntarily with the goal of improving their economic situation and that of their family by means of furthering their education and improving their employment opportunities. In general, the effects of these varying "push" factors on mental health have yet to be clearly understood.

Some of the more recent empirical studies with immigrants from Mexico and Central America have revealed that contrary to long-held beliefs based on traditional sex-role assignments, Hispanic females are just as likely as their male counterparts to migrate to, and remain in the U.S. on their own (Cheney, 1985). Furthermore, Tienda, Jesen, and Bach (1984) reported that between 1970 and 1980 almost fifty percent of those who migrate from Mexico to the U.S. between the ages of 20 and 29 years were women. This finding has been supported by other reports that indicate that among Mexican immigrants there are approximately the same proportion of males to females (Portes & Bach, 1985). It is also known that undocumented women are more likely than undocumented men to find a job during the early phase of migration and have at least a low but steady income (Salgado de Snyder, 1986).

A number of impressionistic as well as empirical studies have suggested that the impact of migration on Hispanic women and their multiple role changes is different from the impact on men (e.g., Vargas-Willis & Cervantes, 1987; Espin, 1987). Both immigrant men and women have to cope with migration stress, but unlike their male counterparts, immigrant women have to additionally cope with the stressors associated with the expectations and performance of their multiple roles such as mothers, wives, and employees. It should be mentioned, however, that no studies have carefully examined gender differences in the perception of immigration and role stress among immigrants from Latin American countries.

The purpose of the present study was to examine gender and ethnic differences in psychosocial stress, including stressors associated with recent migration as measured by a new culturally sensitive instrument, the Hispanic Stress Inventory (HSI) (Cervantes, Padilla, & Salgado de Snyder, 1990). A second aim was to examine ethnic and gender differences in generalized distress in a community sample of adult Mexican and Central American immigrants. Level of generalized distress among this immigrant sample is also compared to two U.S. born samples comprised of Mexican Americans and Anglo Americans.

Finally, given the much cited importance of strong family values and maintenance of family unity among Hispanic groups, we wanted to begin

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to explore specific stressor events associated with family conflict. Of particular interest were any noticeable gender or ethnic differences in the experience and appraisal of such specific family related stressors. Specificity in the identification of culturally relevant family stress can assist researchers and clinical service providers with baseline information on the process of psychosocial change at the family level as a function of gender and ethnicity.

## METHOD

### *Subjects*

A total of 593 respondents (293 males and 300 females) from three adult community schools located in the Los Angeles area participated in the study on a voluntary basis. Respondents were divided into two groups: Immigrants ( $n = 264$ ) and U.S. born respondents ( $n = 329$ ). The first group was comprised of 138 Mexican and 126 Central American adult immigrants with an average of 2.2 years of residence in the U.S. The U.S. born group included 188 adult second or later generation Mexican Americans and 141 adult Anglo Americans born and raised in the U.S. and whose primary language was English.

The immigrant sample was mostly Catholic (73%) with a mean age of 24 years ( $SD = 7.7$ ), a mean educational attainment level of 13 years ( $SD = 3.2$ ). Forty percent were employed, and 16% were married and had children.

As for the U.S. born group, their mean age was 22 years ( $SD = 5.3$ ) with an average of 13 years of education ( $SD = 1.8$ ). Fifty-three percent of the subjects were employed and 12% were married and had at least one child.

It should be noted that the educational attainment level of our immigrant subjects is higher than that usually found among at least Mexican immigrants (McCarthy & Burciaga-Valdez, 1985). By controlling for age and educational level of our respondents, we believe that our findings are more generalizable than cross-cultural studies which have not taken into account education and age.

### *Procedures*

All respondents were recruited through announcements in school bulletins as well as by announcements made by instructors during class. Upon volunteering, subjects were assigned to predesignated classrooms where they

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were given instructions and administered the entire questionnaire in group sessions of approximately 10-15 persons per group. At the end of the session and upon completion of the questionnaire subjects were paid \$5.00 for their participation in the study.

The instrument was administered in either English or Spanish depending on the language proficiency of the respondents. The battery included a demographic checklist, the Hispanic Stress Inventory (HSI) (Cervantes, Padilla, & Salgado de Snyder, 1990), and the Center for Epidemiological Studies Depression Scale (CES-D) (Radloff, 1977).

### *Instruments*

The Hispanic Stress Inventory is a newly developed and culturally sensitive instrument to assess psychosocial stress among U.S. Hispanics (Cervantes, Padilla, & Salgado de Snyder, 1990). The administration of the HSI calls for the respondent first to indicate whether the stressor situation described in each item of the HSI had occurred to him/her in the past three months. If the subject responds affirmatively to a particular item, he/she is then asked to rate the appraised stressfulness of that event on a five point Likert scale from "Not at all stressful" coded as 1 to "Extremely stressful" coded as 5. High scores in the HSI or any of its subscales indicate high levels of psychosocial stress experienced by the individual. Sample items can be found in Table II.

There are two versions of the HSI, one developed specifically for Hispanic immigrants and the second developed for U.S. born Hispanics. Both assess the general construct of psychosocial stress across different life domains. The Immigrant Version of the HSI is comprised of a total of 73 items and 5 subscales: Immigration Stress, 18 items (Range 18-90); Cultural/Family Conflict, 13 items (Range 13-65); Marital Stress, 16 items (Range 16-80); Parental Stress, 13 items (Range 13-65); and Occupational Stress, 13 items (Range 13-65). The U.S. Born Version has 59 items and 4 subscales: Cultural/Family Conflict, 22 items (Range 22-110); Marital Stress, 14 items (Range 14-70); Parental Stress, 9 items (Range 9-45); and Occupational Stress, 14 items (Range 14-70). All subscales of both versions of the HSI had a moderate to high internal consistency with alpha coefficients ranging from .77 to .91. A description of the reliability, validation, and applications of the HSI can be found elsewhere (Cervantes, Padilla, & Salgado de Snyder, 1990).

The CES-D (Radloff, 1977) is a 20 item scale that has been widely used to assess depressive symptomatology and generalized distress. Subjects are asked the number of days during the prior week in which they felt as indicated in the item (i.e., I felt my life had been a failure). The CES-D has a

score range of 0-60, scores of 16 or higher are indicative of generalized psychological distress. Findings of numerous studies conducted with community samples of Hispanics using the CES-D indicate that this instrument possesses good psychometric properties when used with Hispanic adults (e.g., Roberts, 1981; Evans, Acosta, Yamamoto, & Slikbeck, 1984).

## RESULTS

First, a series of Pearson correlations were calculated separately for both immigrant and U.S. born male and female respondents in order to determine the strength of the relationship of the HSI subscales and the outcome measure (CES-D). The correlations for the two groups were similar. Among the immigrants, the two HSI subscales, Immigration Stress and Cultural/Family Conflict, were positively correlated with the outcome measure CES-D ( $r = .24$  and  $r = .45$ , respectively,  $p < .000$ ). As for the U.S. born respondents, only the Cultural/Family Conflict was correlated significantly with CES-D ( $r = .39$ ;  $p < .000$ ).

It should be noted that the HSI subscales Marital, Parental, and Occupational Stress were weakly, and in some instances even negatively correlated with the outcome measures in both groups of respondents. This may be due to the small variance associated with the scales which in turn reflects the small number of subjects who in fact were married, had children, and were employed.

Next, a series of  $2 \times 2$  (gender by ethnicity) analyses of variance (ANOVAs) were computed for each subscale of the Hispanic Stress Inventory (HSI) and the CES-D in order to determine main effects and interactions. Separate ANOVAs were computed for immigrant and U.S. born respondents. Table 1 presents the results of these analyses.

As can be seen from the table, among the immigrants, a gender main effect was observed on the HSI Cultural/Family Conflict subscale ( $F(1) = 11.3$ ;  $p < .000$ ) and the outcome variable CES-D ( $F(1) = 5.0$ ;  $p < .05$ ). Females scored significantly higher than males on the two measures. Also among immigrant respondents ethnicity was found to have a main effect on the Immigration Stress subscale ( $F(1) = 6.1$ ;  $p < .01$ ) as well as on CES-D ( $F(1) = 4.6$ ;  $p < .05$ ). Central American individuals had significantly higher scores on both scales than their Mexican counterparts.

In regard to the U.S. born respondents, a gender main effect was found on Cultural/Family Conflict ( $F(1) = 5.3$ ;  $p < .05$ ) and CES-D ( $F(1) = 4.3$ ;  $p < .05$ ), while ethnicity had a main effect on three HSI subscales, Cultural/Family Conflict ( $F(1) = 49.8$ ;  $p < .000$ ), Marital ( $F(1) = 3.6$ ;  $p < .05$ ), and Parental Stress ( $F(1) = 8.1$ ;  $p < .01$ ). In all comparisons, Mexican Americans had significantly higher scores than Anglo Americans. Only one

Table 1. Mean Scores and F-ratios on the HSI Subscales and the CES-D for Immigrants and U.S. Born Respondents by Gender and Ethnicity

	Immigrants						U.S. Born					
	Gender		Ethnicity		Gender		Ethnicity		Gender		Ethnicity	
	Males (n = 152)	Females (n = 112)	F	Mexicans (n = 138)	Central Americans (n = 126)	F	Males (n = 141)	Females (n = 188)	F	Mexican Americans (n = 188)	Anglo Americans (n = 141)	F
HSI Subscales												
Immigrant	33.0	32.4	> 1.0	30.9	34.8	6.1 <sup>b</sup>	-	-	-	-	-	-
Cultural Family Conflict	24.2	27.7	11.3 <sup>b</sup>	25.2	26.3	2.6	37.5	41.1	5.3 <sup>a</sup>	43.9	33.7	49.8 <sup>c</sup>
Marital	17.1	18.3	5.0 <sup>a</sup>	17.5	17.7	< 1.0	14.5	15.6	5.4	15.6	14.6	3.6 <sup>a</sup>
Parental	15.7	15.4	< 1.0	15.0	16.3	3.0	9.7	9.9	< 1.0	10.3	9.2	8.1 <sup>b</sup>
Occupational	19.2	18.4	> 1.0	18.9	18.8	< 1.0	18.4	17.7	< 1.0	18.3	17.6	1.1
CES-D	15.5	17.7	5.0 <sup>a</sup>	15.5	17.5	4.6 <sup>a</sup>	13.7	15.8	4.3 <sup>a</sup>	15.5	14.1	1.4

<sup>a</sup> .05  
<sup>b</sup> .01  
<sup>c</sup> .001

gender by ethnicity interaction was found to be significant and that was for Occupational Stress ( $F(2) = 6.3; p < .01$ ). Here Mexican American males had higher scores on this scale than did the other groups.

In order to obtain a better understanding of the specific family life situations that seem to affect females more than males, a series of *t*-tests were computed for both immigrants and the U.S. born groups using the individual items of the Cultural/Family Conflict subscale of the HSI. Among the immigrant sample, significant differences between males and females were found for only the following three items: "Some members of my family have become too individualistic" ( $M = 1.8$  males vs.  $M = 2.2$  females;  $t = -2.5; p < .01$ ); "I've had serious arguments with family members" ( $M = 1.8$  males vs.  $M = 2.5$  females;  $t = -3.43; p < .001$ ); and "I've felt that being too close to my family interferes with my own goals" ( $M = 1.8$  males vs.  $M = 2.2$  females;  $t = -2.26; p < .05$ ). Among the U.S. born respondents only two items were found to differentiate significantly between males and females: "Family relations are becoming less important" ( $M = 1.6$  males vs.  $M = 1.9$  females;  $t = 2.09; p < .05$ ); and "I've felt as though I'd never see some family members again" ( $M = 1.4$  males vs.  $M = 1.8$  females;  $t = -2.4; p < .01$ ).

Similarly, based on the previously reported results of the ANOVAs a series of *t*-tests were conducted to have a better understanding of the specific situations that are more problematic to some individuals according to their ethnic group. Ethnic differences were explored using the individual items from two of the HSI subscales: the Immigration Stress subscale for the immigrants (Mexicans vs. Central Americans) and the Cultural/Family Conflict subscale for the U.S. born group (Mexican Americans vs. Anglo Americans).

Two items from the Immigration stress subscale showed significant differences (above the .01 level of significance) between Mexican and Central Americans: "I haven't forgotten the war related deaths in my home country" ( $M = 1.3$  Mexicans vs.  $M = 2.0$  Central Americans;  $t = -4.6; p < .000$ ), and "Because of poor English it's been hard to interact with others" ( $M = 2.0$  Mexicans vs.  $M = 2.5$  Central Americans;  $t = -2.6; p < .01$ ). It should be noted that although the two groups of immigrants differed significantly on only these two items, Central Americans consistently appraised all Immigration stress items higher than their Mexican immigrant counterparts.

In regard to the U.S. born group, 15 out of the 21 items of the Cultural/Family Conflict subscale differed significantly between Mexican Americans and Anglo Americans. These items are listed in Table II. As can be observed, Mexican Americans consistently rated all items as significantly more stressful than the Anglo American respondents.



Table II. Ethnic Differences on Cultural/Family Conflict Items

Cultural/Family Conflict Items	U.S. Born Group		t value df = 327
	Mexican Americans (n = 188)	Anglo Americans (n = 141)	
Some members of my family have become too individu- alistic	1.9	1.4	4.4 <sup>b</sup>
I've seen traditional religious customs ignored	1.9	1.3	5.7 <sup>b</sup>
I've seen friends treated badly because they are Latinos	2.6	1.7	5.8 <sup>a</sup>
Family relations are becoming less important	2.0	1.5	4.3 <sup>a</sup>
The need to achieve economi- cally has drifted me away from my family	1.9	1.5	3.3 <sup>a</sup>
I've been around too much violence	2.4	1.5	5.1 <sup>b</sup>
I've put pressure on myself to provide more things to my family	2.1	1.6	4.1 <sup>a</sup>
I felt as though I'd never see some family members again I haven't forgotten the war related deaths of friends and family	1.8	1.4	2.6 <sup>a</sup>
There's been physical violence among members of my / family	1.9	1.3	4.7 <sup>b</sup>
People close to me have been less concerned about morals	1.9	1.3	4.7 <sup>b</sup>
I've had serious arguments with family members	2.8	2.0	4.6 <sup>b</sup>
There's been conflict among members of my family	2.7	2.2	2.8 <sup>a</sup>
I've felt that members of my family are losing their religion	2.0	1.2	6.3 <sup>b</sup>
Family members have consi- dered divorce as a solution to their problems	2.0	1.4	4.6 <sup>a</sup>

<sup>a</sup>p < .01.<sup>b</sup>p < .000.

In terms of generalized distress, 43% (n = 255) of the total sample (N = 593) had scores of 16 or higher on the CES-D. Females scored significantly higher than males (M = 16.5 vs. M = 14.6; t = -2.5; p < .01). Also, when analyzed by ethnic group differences were found in CES-D scores among the four groups. Central American immigrants had the highest CES-

D scores ( $M = 17.5$ ) followed by Mexican immigrants ( $M = 15.5$ ); Mexican Americans ( $M = 15.5$ ) and Anglo Americans ( $M = 14.1$ ) ( $F(3) = 4.1$ ;  $p < .01$ ). A Scheffe's a posteriori contrast test revealed that only the Central American and the Anglo American groups differed significantly from each other ( $\alpha .05$ ).

Finally, stepwise multiple regressions were conducted to determine the predictive value of gender, ethnicity, and HSI subscales on level of generalized distress as measured by the CES-D. The variable gender and ethnicity were dummy coded (0, 1) and entered in the regression equation along with the HSI Stress subscales for each group, immigrants and U.S. born represents.

The results of the regression analyses with the immigrant sample revealed that immigration stress alone accounted for most of the variance of CES-D scores ( $R = .21$ ;  $F(1, 262) = 66.6$ ;  $p < .0000$ ) followed by Cultural/Family Conflict which added another 4% to the total predicted variance. In fact these two variables were the only two predictors reaching the established statistical criteria to be included in the stepwise regression.

Very similar results were found for the U.S. born respondents. Among this group, Cultural/Family Conflict alone accounted for the greatest amount of variance in CES-D scores ( $R = .14$ ;  $F(1, 327) = 54.5$ ;  $p < .000$ ) followed by gender which accounted for another 2 percent of the variance. The total variance explained by these two variables then was 16% ( $R = .16$ ;  $F(2, 326) = 10.3$ ;  $p < .000$ ). No other predictors reached the criteria to be included in the regression.

## DISCUSSION

The research literature which examines the mental health of Hispanic immigrants, as well as U.S. born Hispanics is growing. Currently much more is known about the prevalence and incidence rates of specific psychological problems among this ethnic group that even just a few years ago (e.g., Karno, Hough, Burnam, Escobar, Timbers, Santana, & Boyd, 1987). The literature is generally in agreement that Hispanic females are at greater risk for experiencing psychological difficulties than their male counterparts and some studies add that the process of immigration may too raise this risk.

The current study attempted to expand on what is known by examining the psychosocial correlates of generalized distress as it relates to gender and ethnic differences. Our investigation first suggests a strong relationship between immigration stress, as operationalized by the Hispanic Stress Inventory and generalized psychological distress as measured by the CES-D. A similar relationship was noted between the HSI measure of Cultural/Family Conflict and psychological distress. These relationships were found

among both immigrant males and females. Similarly, for the U.S. born males and females, higher scores on the Cultural/Family Conflict subscale were strongly related with increased generalized distress.

A close examination of gender differences revealed that the immigrant females in our sample had higher levels of stress related to Cultural/Family Conflict, as well as higher scores on the measure of generalized distress when compared with immigrant males. This raises an important issue for future research, namely the need for a more clear understanding of the specific changes that immigrant females undergo during the adaptation process in a new cultural context. This research study has pointed to the fact that family stress arising during the course of the early migration experience may in fact impact females more negatively than their male counterparts.

The shift from a social system which emphasizes definite roles for males and females (e.g., Latin America), to one in which greater freedom in sex role behavior is a possibility, and at times a necessity for economic well-being can certainly affect one's sense of self-identity and potentially be a source of both personal and familial conflict (Vazquez-Nutthall, Romero-Garcia, & De Leon, 1987). Our results seem to reflect something about this process of personal and familial change and highlight two important factors: 1) immigrant females in this sample experience greater degrees of stressful change events in association with family and personal issues during the migration process, and 2) the impact of these multiple changes may more adversely affect their mental health status (higher depression) when compared with their male immigrant counterparts.

An interesting correlate among U.S. born Mexican American males can be seen in the present results. Greater levels of Occupational Stress and dissatisfaction among Mexican American males compared with Anglo American males may reflect the inability to attain personal growth and job advancement within a marketplace that discriminates against Hispanics, especially males.

In addition to a specific focus on gender, we were also particularly interested in exploring differences in psychosocial stress and generalized psychological distress as related to different immigrant groups. First, our results pointed to higher levels of generalized distress among those recent immigrants from Central American countries in contrast to recent Mexican immigrants. Central Americans were also found to report higher levels of immigration stress than Mexican immigrants. A close examination of immigration stress items revealed that the Central American respondents reported greater difficulty in adaptive processes, particularly as related to social problems resulting from non-English language proficiency. In addition, Central Americans appraised pre-immigration stress items significantly higher than their Mexican immigrant counterparts. Central Americans reported specific events

such as preoccupation with last few months in their home country, inability to forget war-related deaths, and guilt about leaving family/friends in the home country as considerably more stressful than Mexican immigrants. Clearly, the Central Americans differed in many respects from the Mexican immigrants, and future research must be sensitive to this intra-group heterogeneity as related to mental health status.

It is hoped that the present study will help lay the groundwork for future studies of Hispanic groups that are sensitive to both gender and ethnic variation. Such specificity is a prerequisite for understanding the process of psychosocial stress and transition which is an unavoidable aspect of culture change.

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