

EFFECTS OF ACCULTURATION,
FAMILY SOCIAL SUPPORT AND LABOR MARKET EXPERIENCE
ON MEXICAN IMMIGRANT WOMEN IN THE UNITED STATES

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DEDICATION

This thesis is dedicated to my role models and parents, John and Tessie Balan. It has been the greatest honor being your daughter.

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ABSTRACT

This thesis analyzes the relationship between immigration and mental health. I used data from a health and migration study of Mexican immigrant women in a Houston community. I found a statistically significant negative relationship between family social support and feelings of depression. Thus, family social support may have buffered some harmful effects of immigrating to the United States. However, I found inconsistent results with labor market variables that may be due to a measurement problem. Both employment variables were statistically significant ($p < .05$) for models (predictor, predictor and control) including loss of interest and these variables remained significant after control variables were added. Unfortunately, only one of the work variables--the number of months the respondent worked--was in the predicted direction. Contrary to expectations, the other employment variable (ever worked) was negatively related to a loss of interest in previously pleasurable activities.

INTRODUCTION

Since 1965, the United States has attracted immigrants from Mexico, Central and South America, and Asia. Presently, the majority of all immigrants to the U.S. hail from Mexico and South/Central America. Mexico is the leading source of legal immigrants to the United States sending 18 percent of all immigrants in 1996 (U.S. Department of Justice 1996). Despite the growing diversity of U.S. immigrants, few studies have addressed issues related to health and mental health has been especially overlooked. The present project addresses this issue by examining the effects of immigrant status on the mental health of Mexican immigrants. As I will show, this group has a unique “context of reception” in the United States (Portes and Rumbaut 1996); this context, created by U.S. policies, employers, and the characteristics of pre-existing communities, is a critical determinant of subsequent mental health (Portes and Rumbaut 1996).

THE MEXICAN/UNITED STATES RELATIONSHIP

Context of Reception. In theory, Mexicans and other immigrants enter the United States and face identical “contexts of reception.” In practice, however, the reception of Mexicans is very different from that of other immigrants. Portes and Rumbaut (1996) define a “context of reception” by three elements: the policies of the receiving government, the conditions of the host labor market, and the characteristics of the immigrants’ ethnic communities. In this study, there are no U.S. policies that apply specifically to Mexicans and this study does not focus on the immigrant’s ethnic communities. I begin my discussion of the context of reception by reviewing the reason for

migration to the United States as well as the demographics of these immigrants. Then I move on to discuss the one relevant context of reception, the conditions of the host labor market.

Before I discuss the host labor market, it is important to establish the reasons why Mexicans migrated to the United States. The U.S. occupation of Mexico set the stage for U.S. migration and started the long history of Mexicans migrating to the United States (Bustamente et al. 1992). Since the 19th century, Mexico has supplied labor to the United States. More recently, from the 1940s, with the formalization of Bracero Programs that attracted seasonal workers to agricultural centers until 1964, migration from Mexico has continued relatively unabated (McCarthy 1985;Valdez 1987). The Mexican pattern of U.S. immigration is different from that of other immigrant groups. In the 1990s, on average, Mexico has sent immigrants who were relatively young with the average age of 23 years (U.S. Department of Justice 1996). And, although a large percent of Mexicans reported California as their intended destination, many chose Texas (28 percent) followed by Illinois (7 percent) as their destination.

The relevant context of reception variable for Mexican immigrants to the U.S. is the conditions of the host labor market. I discuss this variable by describing the resources necessary to enter the host labor market. Looking at occupational status, 88 percent of Mexican immigrants are reported to have blue-collar jobs (U.S. Department of Justice 1996). Further, only seven percent of Mexican immigrants were in managerial, professional, and technical U.S. occupations in 1996. This is due, in part, to the low levels

of educational achievement in Mexico (Riding 1989). Among other causes, the population boom in the 1940s made it almost impossible for Mexico to provide adequate education for all.

Another important issue for Mexican immigrants besides their host labor market experience is their mental health. The following literature review will first describe general studies of ethnic immigrants and then it will focus on the topic for the present study, Hispanic culture and culturally compatible mental health services. In summary, in this thesis I will test how immigrant status affects the mental health of Mexican immigrants to the U.S. using data from Mexican immigrants who reside in Houston. In this research, I examine the impacts of duration of Texas residence in the United States, familial social support, and labor market employment on the mental health status of Mexican immigrants.

LITERATURE REVIEW

In this section, I review studies on immigrant mental health and the Hispanic perspective on mental health. Then, I describe findings from studies that specifically focus on Mexican immigrants. As a whole, my review suggests that immigrant status affects mental health through the process of acculturation. Robert Park defines acculturation as “synonymous with assimilation and used to describe the process by which an outsider, immigrant, or subordinate group becomes indistinguishably integrated into the dominant host society (Marshall 1998).”

GENERAL STUDIES OF ETHNIC IMMIGRANTS IN THE UNITED STATES

Earliest Studies. The earliest studies of immigrants reflected a “nativist sentiment” that justified prejudice and discrimination towards immigrants. For example, in 1855, Edward Jarvis, a well-respected scientist and physician, completed the first epidemiological study of psychopathology and immigration. From this work, Jarvis concluded that the foreign-born Irish had a higher prevalence of insanity in each social stratum than did the native-born in Massachusetts (Stoep and Link 1998). Jarvis’ study had a very powerful effect on mental health policy. One consequence was that the government built separate mental health facilities for foreign-born and native-born, which, to some extent, appeased the newly emerging nativist sentiment within the population in the late 1800s.

This nativist sentiment continued into the early 1900s when racist theories of immigration developed as a result of Social Darwinism and the science of eugenics (Portes and Rumbaut 1996). These theories suggested that immigrants were of defective biological stock. Ultimately, it

resulted in the 1924 National Origins Act that barred immigrants from some countries—especially those in Asia and Southeast Europe by setting national origin quotas. This policy reflected the belief that immigrants were inferior, especially those of Asian and Southeastern European descent.

However, by the end of World War II, there was a shift toward a less nativistic sentiment and a new era arose within which researchers began to emphasize the conditions that affect many immigrants such as poverty and spatial concentration, without embedding subjective assumptions in their work (Portes and Rumbaut 1996). In addition, policies in the 1952 and 1965 Immigration Acts abolished racial quotas (Portes and Rumbaut 1996). This cycle between more nativist and more tolerant attitudes toward immigrants seems to continue. With any new influx of immigrants into the United States, the nativist sentiment seems to resurface.

Recent Studies. The more recent studies on the mental health status of immigrants deal with those ethnic immigrants from Mexico and Asia (U.S. Department of Justice 1996). For example, in Vega and Rumbaut's (1991) overview of the current research on ethnic minorities and mental health, some ethnic minority groups (including Mexicans) were found to “somatize” psychological concerns. That is, when they experienced personal and social problems, they interpreted them through the medium of their bodies. More recent research has also shown that even though Mexican-Americans distinguish psychiatric problems from somatic disorders, they are more likely to seek family physicians instead of mental health providers. Thus, Mexican Americans seem to have a unique cultural perception of their own mental health which differs from larger the Caucasian population. Unfortunately, many mental health studies do not recognize the

need to understand an ethnic minority from within their own cultural perceptions about mental health. Following this idea, Angel and Thoits (1987) suggest that, in order to understand an ethnic minority's mental health, the researcher should study mental health and distress within a particular ethnic and cultural group. Meanwhile, Vega and Rumbaut (1991) argue that future studies should include cross-cultural studies done on minority immigrants and comparative studies within each minority group. Further, they assert that research should look at race-ethnicity as a social process incorporating longitudinal studies, studies of acculturation and racism, and the consequences of racial discrimination (Vega and Rumbaut 1991). Thus, there is a need to understand the ethnic minority from within its own cultural context as well as compared to other groups. The advantage of the present study is that it was conducted by native speakers with a sample of Mexicans in Mexico and in the United States. Because of this fact, a researcher can use this study to compare native and immigrant Mexicans and note any differences. Perhaps there are differences in the level of stigma that each group attached to mental illness, perhaps not. At any rate, the stigma of mental illness has proven to be an important issue in immigration studies (Surgeon General's Report 1999).

Stigma. The Surgeon General's Report (1999) regards the stigma of mental illness as a key element in recent immigration studies. For immigrants, this stigma can obstruct them from seeking treatment, isolate them, and lead to outright discrimination and abuse (Surgeon General's Report 1999). For example, Siantz (1993) found that labeling and stigma add to the negative impact of being a minority child in the United States. Thus, the mental health system may mistreat

and misdiagnose these children because it disregards the impacts of their race and ethnic origin on the ways they are treated by others.

In addition to stigma, another important issue in immigration studies is labeling. Link and Cullen (1991) analyzed a population of psychiatric patients. They found that the labeling of patients' stigmatized status had lasting effects on individual coping strategies. Another study analyzed stigma and its effects on men with diagnosed mental illness and substance abuse (Link et al. 1997). The researchers conducted a longitudinal study on men and found strong and enduring effects of stigma on their well-being. Stigma continued to complicate their lives even as treatment improved their symptoms and functioning.

HISPANIC CULTURE AND CULTURALLY COMPATIBLE SERVICES

Hispanic Culture. I now shift focus from the general studies of ethnic immigrants in the United States to those of Hispanics in the United States. Specifically in this section, I want to understand Mexican cultural values in order to explain their mental health attitudes and status.

Simoni and Perez (1995) use terms such as *simpatia*, *familism*, *confianza*, *personalismo*, and reciprocity to describe Mexicans' cultural values. These researchers define these terms; *simpatia* is the need for behavior that promotes smooth and social relationships; *familism* involves the strong identification with and attachment to nuclear and extended families; *confianza* is mutual generosity; *personalismo* is relating to and trusting people rather than institutions, and reciprocity entails a give and take relationship (Simoni and Perez 1995). Mental health professionals, in order to account for these unique cultural viewpoints, should modify their

approaches to treatment. For example, in order to maintain *simpatia*, the mental health worker should try to avoid direct confrontation that would upset the Mexican patient's need for smooth social relationships. Further, since the family is the core of a person's identity, the family should be part of the treatment process. By understanding the cultural values within the Mexican community, we can better understand how to treat and serve these people better.

Culturally Compatible Services. Since Mexican immigrants have a unique cultural background, mental health services should adapt to the individual's culture in order to offer the best treatment. Rogler et al. (1987) discuss three broad approaches to cultural sensitivity: (1) making traditional mental health treatments more accessible to Hispanics, (2) selecting an available therapeutic modality (appropriate treatment) according to the perceived features of Hispanic culture, and (3) taking elements from Hispanic culture and using them to modify traditional treatments or as an innovative treatment tool. The first approach involves Spanish-speaking health professions as the most basic need in order to fully understand the patient's problems as well as contacting the ethnic community to attract Hispanics to use and keep its services. The second approach involves culturally sensitive therapy for the individual patient. This framework makes it much easier for Hispanics to understand the mental health system.

Another issue concerning culturally compatible services is the diagnosis and evaluation of Hispanics' mental health status. Malgady et al. (1987) noted there can be problems with psychological testing to assess ethnic, socioeconomic status, or linguistic minorities using instruments that were created, standardized, and validated from a nonminority, middle-class,

English-speaking perspective. There may even be problems with traditional projective tests such as the Thematic Apperception Test (TAT) that characterize Hispanics and Blacks as less verbally fluent on the average than the members of nonminority groups. So, one of the problems with the studies of mental health is the use of tests that measure mental health. Another aspect of the mental health research is the utilization rates of certain ethnic groups.

UTILIZATION OF MENTAL HEALTH SERVICES

Utilization by Hispanic and Other Groups. There have been several studies of the rate of mental health service utilization by Hispanics and other minority groups when compared with the Caucasian population. For example, Simoni and Perez (1995) conducted a utilization study on Hispanics, focusing on the Latino culture and mental health. They explore an important link between the utilization of mental health services and the Latino culture. Previous studies had shown that Latino subgroups have the lowest utilization rates of traditional mental health services as well as the underutilization of less traditional primary prevention programs. They explained this trend by suggesting that Latinos do not use these services as much because they are incompatible with Latino cultural values and characteristics. They suggest that studies that show underutilization of mental health services may not be telling the whole story. There are several possible explanations why Latinos underutilize mental health services: they experience obstacles (physical and monetary) to getting mental health treatment, they do not need these services because they are mentally fit, or they use alternative forms of treatment such as general physicians or folk remedies.

In addition to studies on Hispanics, O'Sullivan et al. (1989) have reported on community mental health center services for several other ethnic populations. Their study is a follow-up of the studies done by Sue and colleagues in the mid 1970s in the Seattle King County area for the Washington Mental Health Information System (O'Sullivan et al. 1989). They looked at patients from Caucasian, Asian, Black, Hispanic, and Native American backgrounds (O'Sullivan et al. 1989). Their results show a higher utilization rate for non-Caucasians than for Caucasians after the installation of the community mental health center program (O'Sullivan et al. 1989). In fact, they found that Hispanics were represented at approximately their expected rates and received more individual therapy (O'Sullivan et al. 1989). They attribute this improvement from Sue's report of inadequate service delivery to ethnic minority populations to an increased language match, an ethnicity match between client and therapist, and the location of the agency within the ethnic community (O'Sullivan et al. 1989). These findings show that there is greater use of mental health facilities when they adapt their practices to the unique needs of Mexicans and increase their utilization of services.

Mexican Utilization. Looking specifically at Mexican utilization, Wells et al. (1987) found acculturation to be a critical variable when comparing Mexican-Americans to non-Hispanic Whites. They found that less acculturated Mexican-Americans were less likely to utilize mental health services, and if they did, it was through general medical providers instead of specialists. This implies that there are barriers to mental health care for Mexican-Americans, but more so for

the less-acculturated who may not be familiar with the services available or with the providers or such services.

Outside the realm of community mental health centers, Griffith (1985) conducted a community survey of the psychological impairment of Anglo- and Mexican-Americans. He tried to create a baseline measurement of psychological impairment for Mexican-Americans in order to establish the utilization rate for this group (Griffith 1985). Griffith (1985) found that while white Anglo and Mexican-Americans were not different in anxiety, psychosocial dysfunction, and depressive symptoms, but there was underutilization of mental health services by Mexican-Americans when compared with Anglos. There were also different relationships for age and psychosocial dysfunction symptoms and between income and anxiety problems for Mexican-Americans when compared with Anglos (Griffith 1985). This study illustrates that Mexican-Americans have the same mental health needs as Anglo-Americans but that they tend to underutilize services, especially when these services do not seem to suit their needs.

Trevino et al. (1979) conducted a similar study on a community mental health service center in Laredo (a Texas-Mexico border city). They reported that Mexicans in this predominantly Mexican city (86.3 percent Mexican and 13.7 percent Anglo-American) typically underutilized mental health services. However, after trying to minimize the barriers between Mexicans and these services such as language, social class, cultural differences, and economic barriers, the utilization rate met or surpassed the expected values. They also found that Mexican-Americans need mental health services as much as Anglo-Americans, but the major difference

between the two groups in terms of use is socioeconomic status (SES). This study is another example of how mental health facilities that have adapted to the unique needs of Mexican immigrants have higher utilization rates.

Rogler et al. (1989) discuss a framework for the research on Hispanics and their mental health. They described a five-phase model for viewing the various types of mental health research on Hispanics. The first phase is the epidemiology of the emerging mental health problems; the second phase is the utilization or help-seeking behaviors that can lead people to contact mental health service agents; the third phase is an assessment where mental health workers try to evaluate or diagnose their patient's psychological condition; the fourth phase is treatment when the problem is dealt with through psychotherapeutic intervention; and the final phase is rehabilitation, where treatment is terminated and the patient resumes a normal life in the community whether or not they are relieved of the problem. Beyond issues of utilization, mental health outcomes is another important consideration with regard to immigration studies.

THE MENTAL HEALTH STATUS OF MARGINAL GROUPS

The Surgeon General's Report of 1999 highlighted the need for mental health research on marginalized groups like children, adolescents, the elderly, and women. In particular, the Surgeon General's Report also mentions that the Hispanic population is a large minority group in the U.S. that has not been sufficiently studied (1999). This thesis looks at factors that may contribute to depression among Mexican women without children, women with children, and elderly women.

Some of these factors include the length of time in the U.S., family social support, and labor market experience.

Elderly Outcomes. The elderly are a marginalized group with regard to mental health. A problem with understanding elderly mental health is the stereotype that mental illness is a “natural” part of aging. However, almost 20 percent of the population 55 and older have specific mental disorders that are not part of “normal aging” (Surgeon General’s Report 1999). For example, symptoms of depression are widely prevalent among the elderly, affecting 8 to 20 percent of older community residents and 17 to 35 percent of older primary care patients (Surgeon General’s Report 1999). The specific one-year prevalence rate of the DSM definition of major depression is around five percent or less in older people (Surgeon General’s Report 1999). Suicide is linked to depression, and for elderly individuals 85 or older, the suicide rate is the highest at 21 suicides per 100,000, which is almost twice the overall national average (Surgeon General’s Report 1999).

One study that looks at the elderly and mental health is Black et al.’s (1998) study on the correlates of depressive symptomatology among older community-dwelling Mexican-Americans. They found a gender difference where the stronger predictors of depressive symptoms for women were low education, no insurance coverage, low assimilation, and low health locus of control (the amount of control the respondent feels they have over their health). They explained this finding by stating that immigrant women may be torn between two cultures, trying to maintain

familism where family is the core of their life and *marianism* where women are submissive, docile, sentimental, and willing to follow role expectations.

This gender difference was supported by Morton et al.'s (1989) study using the Center for Epidemiologic Studies Depression (CES-D) Scale on an elderly sample of Mexican-Americans. They found that women exhibited more depressive symptoms than men and that married women exhibited lower scores than non-married women (Morton et al. 1989). The researchers also found that income and education independently have an inverse relationship to depression (Morton et al. 1989). This study helped to establish the notion that there are gender differences in mental health outcomes. In other words, women generally suffer from poorer mental health than do men.

Besides gender, another question is whether or not there are significant mental health differences between minority groups. Markides' (1986) study on minority status, aging, and mental health found that Mexican-Americans' mental health and life satisfaction were similar to that of Anglo-Americans when socioeconomic status was controlled. But when not controlling for socioeconomic status, he found Mexican-Americans underutilized mental health services when compared to Blacks and Native-Americans (Markides 1986). His explanation was that the extended kinship family may buffer against individual stress and, thus, reduce the prevalence of mental disorders (Markides 1986). Further, Markides (1986) found that socioeconomic status differences between groups is an important determinant of morale and life satisfaction.

Acculturation. Rogler et al. (1991) a meta-analysis of 30 studies on Hispanic Americans' acculturation and mental health. Their explanations of the different relationships between acculturation and mental health led me to my hypothesis that increased acculturation levels are related to increased levels of psychological distress. They found problems with the ways acculturation has been assessed--past researchers included flawed assumptions of the development of acculturation scales and inadequate items in acculturation inventories (Rogler et al. 1991). There are also problems with grouping diverse subgroups under the term "Hispanic." Additionally, the assessment of mental health status is biased toward the white population. Due to these problems, it is unclear whether the relationship between acculturation and psychological distress is negative or positive. For this data set, I expect to find a positive linear effect between acculturation and psychological distress. In this study, I consider acculturation as a process over time during which an immigrant becomes assimilated into the dominant culture and experiences increased levels of psychological distress.

A positive linear relationship is where immigrants with high acculturation (long-term immigrants) have higher levels of psychological distress (Rogler et al. 1991). This pattern is explained by immigrants becoming increasingly alienated from their primary support groups and exposed to the host society's stereotypes and prejudices toward minorities (Rogler et al. 1991). Kessler et al.'s (1999) cross-sectional study supports this argument by demonstrating that women who live in the U.S. the longest exhibited increased levels of psychological distress.

Kessler et al. (1999) suggest that psychological distress may result from perceived discrimination. He and his colleagues (1999) described the relationship among prevalence, distribution, and mental health correlates of perceived discrimination. They found that associations of perceived discrimination with mental health are comparable in magnitude to those of other more commonly studied stressors (Kessler et al. 1999). Perceived discrimination particularly affects minorities in that nonwhites report higher levels of being discriminated against than whites (Kessler et al. 1999). In fact, 33.5 percent of the respondents in Kessler's sample reported exposure to major longer-term discrimination, while 60.9 percent reported day-to-day discrimination (Kessler et al. 1999). Mexican immigrants are minorities which experience these higher levels of discrimination. In fact, the longer the Mexican immigrants live in the United States, the longer they are exposed to discrimination. Thus, immigrants who have been in the U.S. longer would be expected to have higher levels of psychological distress.

Finch et al. (2000) found similar results to Kessler et al.'s (1999) findings. Specifically, Finch and his colleagues (2000) describe a relationship for Mexican respondents between perceived discrimination, acculturative stress, and mental health using the Center for Epidemiologic Studies Depression Scale (CES-D). The researchers discovered that immigrants with higher levels of acculturation seem to experience higher levels of discrimination (Finch et al. 2000). Contrarily, American born respondents with higher levels of acculturation seem to experience lower levels of discrimination (Finch et al. 2000). Thus, perceived discrimination

seems to be influenced by other variables such as nativity, language acculturation, sex, and country of education (Finch et al. 2000).

Another relevant study compared native Mexican-Americans to immigrant Mexican-Americans. Burnam and colleagues (1987) found that native-born Mexican-Americans with high levels of acculturation had higher lifetime prevalence of mental disorders than immigrant Mexican-Americans. The researchers attribute this finding to selective immigration and a lower sense of relative deprivation for immigrant Mexican-Americans coming from a poor country (Burnam et al. 1987). However, this study was conducted over a one-year period which may not be adequate time to capture acculturation effects for native and immigrant Mexican-Americans. Furthermore, the immigrant sample had more males and married respondents than the native sample, which could yield different results since gender and marital status have been shown to influence psychological distress levels.

Other studies have found patterns inconsistent with those presented by Kessler and colleagues. For example, other researchers have found that immigrants with low acculturation (recent immigrants) have higher psychological distress levels (Rogler et al. 1991). These researchers explained the high distress by arguing that the respondents lost native support networks, lacked American support networks, and were socially isolated from American culture (Rogler et al. 1991). Consistent with this argument, Salgado de Snyder (1987) found married Mexican women had high stress levels from being recent immigrants, had low acculturation levels, and had the highest number of depression symptoms. She also found that the highest levels of

depressive symptomatology measured by the CES-D (Center for Epidemiologic Studies Depression Scale) were found among subjects who immigrated because of someone else's decision to move, experienced discrimination, suffered gender-role conflicts, or who worried about starting a family in this country (Salgado de Snyder 1987).

Other research has shown that other factors influence the relationship between acculturation and mental health status. One of these factors is age. Kaplan and Marks (1990) found that, as acculturation increases, psychological distress significantly increases in young adults but tends to decrease in older adults. The effect of acculturation remained despite the effects of income, education, and sex. One explanation for this result is the way alienation and discrimination can be intervening variables for highly acculturated young Mexican-Americans. That is, this younger group may be trying to advance themselves economically and socially in the dominant society, and therefore may be isolated from its ethnic support system and traditional resources. I expect that younger women in my sample may not be well embedded in their family or community, and thus should experience more mental health problems. Furthermore, I used age as a control variable because it seems to be an intervening variable between acculturation and psychological distress.

Another important factor in the relationship between acculturation and mental health is socioeconomic status (SES). Socioeconomic status affects the relationship between acculturation and depressive symptoms. Cuellar and Roberts (1997) explored different variables affecting depressive symptoms and found that socioeconomic status is more influential than either ethnic

status or gender. Their conclusion was that ethnic status and acculturation per se do not directly affect mental health problems, but rather their impacts are mediated through socioeconomic status. Robert (1998) found that an individual's physical health is linked to socioeconomic status characteristics of their community beyond their own income, education, and assets. However, she did find that individual-level and family-level indicators are still the stronger predictors of general health than are community-level indicators (Robert 1998).

Familial Social Support. Previous literature has shown a relationship between social support and health (House et al. 1988). This work described how social relationships and support are important to the maintenance of health through moderating or buffering psychosocial stress and other health hazards (House et al. 1988). An example of this buffering effect is Briones et al.'s (1990) study on Mexican-Americans. Briones and colleagues (1990) found the link between ethnicity, socioeconomic status, and depressive symptoms was the quality of meaningful support networks. In other words, Mexican-Americans with low socioeconomic status can be shielded from depression if they have meaningful social support networks.

Another study also found a relationship between social support and mental health. House and colleagues (1988) found that social support from family members, spouses, and friends led to better mental and physical health. Further, a lack of social support has been linked with depression, mortality, morbidity, and other negative outcomes (House et al. 1988). Yet another study found a link between social support, social networks, and mental health. Vega et al. (1991) found in their sample of Mexican immigrant women, that family emotional support and income are

predictors of depression. Specifically, they found that family and friend social networks are in place when these women immigrate to the United States (Vega et al. 1991). The researchers describe the family emotional support, which seems to increase over the years, as more important than friend emotional support, which remains constant throughout the years (Vega et al. 1991).

Finally, Zippin and Hough (1985) compared Mexican Nationals (in Juarez, Mexico), Mexican-Americans (in El Paso, Texas), Mexicans in El Paso, and Anglo-Americans. They concluded that Mexican culture has greater interdependence than Anglo-American culture (Zippin and Hough 1985). This interdependence may increase vulnerability to changes in social integration and social support such as immigrating to the U.S. Thus, social support can be expected to be particularly important in explaining the psychological distress of immigrant Mexican women.

This study, which looked at Mexicans in Mexico and in the United States, is similar to the sample for the present study, although my study focuses exclusively on Mexicans in the U.S. Zippin and Hough's (1985) study is also useful because it shows that there is a difference in mental health of Mexicans who choose to immigrate and those who choose to stay in Mexico. Additionally, a crucial part of mental health outcomes is labor market experience.

Labor Market Experience. The literature provides somewhat conflicting findings regarding the impacts of employment on psychological well-being, particularly in the case of married women. In general, previous researchers found that employed women exhibit fewer depressive symptoms than nonemployed women (Wethington et al. 1989).

Meanwhile, Repetti and colleagues (1989) found marital status differences in their review of employment and mental health. The researchers concluded that employment had positive effects on the psychological well-being of unmarried women and married women with favorable attitudes toward employment (Repetti et al. 1989).

Krause and Markides (1985) found similar results in their study of employment and psychological well-being among Mexican-American women. The researchers did not find additive effects of work on distress for married women, but they did find employment outside the home appeared to be beneficial for separated and divorced women. Krause and Markides (1985) also noted that a married woman's gender-role orientation is important because when her work status is congruent with her beliefs of appropriate women's roles, she benefits psychologically from working. Since marital status is an intervening variable between employment and psychological well-being in previous research, I made marital status a control variable in this study.

Kanaiaupuni (2000) found that, in past research on Mexican immigrants, women's social roles were mainly at home: raising the children, fulfilling domestic duties, and existing at the center of the family unit. Thus, women were usually not wage laborers since they believed that they belonged in the home taking care of domestic duties (Kanaiaupuni 2000). Even when the women did work, they were secondary wage earners and usually worked only during times of financial hardship (Kanaiaupuni 2000).

CONCEPTUAL FRAMEWORK AND HYPOTHESES

Conceptual Framework. Previous research on early immigrant studies leads to the following key point: the “nativist sentiment” against immigrants has resulted in perpetuating prejudice and discrimination toward immigrants and in isolating immigrants into different mental health facilities; thus, certain immigrant groups were barred from the U.S., as in the 1924 National Origins Act (Stoep and Link 1998; Portes and Rumbaut 1996). There are cycles of more and less nativist sentiment whereby more nativist sentiment seems to resurface with the influx of immigrants, specifically Mexican immigrants, to the United States. Nativist sentiment has also contributed to stigma of mental illness among immigrants. Social stigma may obstruct the pursuit of mental health treatment, may isolate the immigrant from their family and support system, and may result in discrimination (Surgeon General’s Report 1999). This issue can be further appreciated by an examination of Hispanic culture itself.

Previous literature on Hispanic culture also illustrates the distinct cultural values that influence Mexican immigrants’ unique perception of mental health. The Mexican family is generally very tolerant and supportive of family members with mental illness (Urdaneta et al. 1995). The family’s main concern is that family relations are not disturbed (Urdaneta et al. 1995). This unique view of mental health leads to the issue of culturally compatible mental health services to meet the unique needs of the Mexican immigrant population. The major issue in culturally compatible mental health services is the correct diagnosis and evaluation of mental health

(Malgady et al. 1987). It is important for mental health services to take these issues into account because they can affect the utilization of mental health services by Mexican immigrants.

There is an important link between utilization and culturally compatible services. If mental health services were more compatible to the Hispanic culture and value system, then Hispanic immigrants would utilize (instead of underutilize) these services (Simoni and Perez 1995; O'Sullivan et al. 1989; Wells et al. 1987; Griffith 1985; Trevino et al. 1979). There is a great disservice when Mexican immigrants are not able to get the proper mental health care they need because of culturally insensitive mental health service providers. In addition to larger cultural issues, Mexican-Americans also have specific needs concerning gender, age, and socioeconomic status.

Previous research on mental health outcomes has found that gender, age, and socioeconomic status are intervening variables between Mexican immigrants and mental health. In general, researchers found that the Mexican-Americans with more mental health problems are women, elderly, and socioeconomically disadvantaged (Black et al. 1998; Morton et al. 1989; Markides 1986). In this study, I made gender, age, and socioeconomic status control variables since they affect the relationship between Mexican immigrants and mental health outcomes. Yet another issue facing mental health services in the U.S. is the relationship of acculturation to psychological distress in Mexican-American immigrants.

Previous research on acculturation and psychological distress has been mixed. Researchers are unsure whether the relationship is positive or negative (Rogler et al. 1991). The

researchers finding a positive relationship--where the well-acculturated immigrants have higher levels of psychological distress--explained that immigrants were alienated from their primary support groups, exposed to perceived discrimination, and felt a sense of relative deprivation because of their minority status (Rogler et al. 1991; Kessler et al. 1999; Burnam et al. 1987). Meanwhile, research finding a negative relationship--where the less-acculturated immigrants have higher levels of psychological distress--explains that some Mexican women were affected by someone else's decision to move, experienced discrimination, suffered gender-role conflicts, and worried about starting a family in the U.S. (Salgado de Snyder 1987). In the present study, I propose that there is a positive relationship between acculturation and psychological distress for my sample of Mexican immigrant women. As I mentioned earlier, I suspect that, with increased acculturation, Mexican immigrants become alienated from their original support networks and are more subjected to American stereotypes and prejudices (Rogler et al. 1991). My thesis stems from previous research done on acculturation, except my focus is on immigrant Mexican women. Mental health services would do well to take this relationship into account when servicing Mexican-American immigrants. In addition, another important relationship exists between social support and psychological distress.

Previous literature on social support and psychological distress has led to the following key points: social support from family members, spouses, and friends may moderate or buffer psychosocial stress, social support can lead to better mental and physical health. Since the Mexican culture is more interdependent than Anglo-American culture, this higher interdependency

may explain the negative mental health effects of immigration (Briones et al. 1990; House et al. 1988; Zippin and Hough 1985). For the present study, I propose that there is a negative relationship between social support and psychological distress. My thesis expands on the research of social support in terms of an immigrant minority community (Mexican immigrant) and how an interdependent Mexican culture is affected by social support. Within this context, another form of psychological support seems to exist when employment status is examined.

Previous studies on labor market experience and psychological distress have shown that employed women generally exhibit fewer depressive symptoms than nonemployed women (Wethington et al. 1989). However, marital status may be a crucial intervening variable between labor market experience and psychological distress. For example, researchers have found that employment had positive effects for unmarried women or married women with favorable attitudes toward employment, and employment was beneficial for separated and divorced women or women whose work status matched their beliefs of appropriate women's roles (Repetti et al. 1989; Krause and Markides 1985). For example, Kanaiaupuni (2000) stated that Mexican women's social roles were mainly at home, they were not typically wage laborers, and if they did work it was to supplement their husband's wages during financial hardship. In terms of the present study, I expect to find a positive relationship between labor market experience and psychological distress. My thesis will expand on the effects of employment on a Mexican immigrant population with unfavorable attitudes toward employment.

Hypotheses. The realm of immigration and mental health studies is vast. I focus on three aspects of the relationship: acculturation, family social support, and labor market experience. Specifically, I expect to find that the Mexican immigrant women who live longer in the U.S. (as measured by combined length of stay since their first visit and their most recent visit to the United States) will have higher levels of psychological distress. Most likely factors such as increased levels of perceived discrimination and exposure to negative stereotypes will greatly affect the Mexican immigrant woman's mental health. Furthermore, I expect that Mexican immigrant women with high levels of family social support (as measured by how many family members live in the U.S. and how many times they visited the respondent) will have lower levels of psychological distress. Perhaps the level of familial social support provides a buffer for the Mexican immigrant women's psychological distress associated with immigrating and adapting to another country. Finally, I expect that Mexican immigrant women with decreased levels of employment (as measured by employment status and their work history for the past 12 months) will be associated with decreased levels of psychological distress. Although research has generally shown that employed women exhibit fewer depressive symptoms than nonemployed women, other studies have shown that married women benefit from employment only if they have favorable attitudes toward employment (Repetti et al. 1989; Krause and Markides 1985; Wethington et al. 1989). Thus, I do not expect the women in my sample to benefit from labor market experience in terms of their mental health status.

DATA AND METHODS

DATA DESCRIPTION

The source of these data is the Health and Migration Survey (HMS, Donato and Kanaiaupuni 1996). The HMS collected information on the health and migration status of Mexican Americans, their families, and specifically, women and children (HMS, Donato and Kanaiaupuni 1996). The respondents in the survey were Mexican women in a predominantly Mexican neighborhood in Houston, Texas (HMS, Donato and Kanaiaupuni 1996). They answered questions about a number of issues including: pregnancy and birth histories, household status, health histories of children, migration and work experience, and family planning practices (HMS, Donato and Kanaiaupuni 1996). These data are part of a larger project on the health consequences of Mexican migration. I focus mainly on the mental health supplement of the HMS which includes questions about mental health topics such as depression and anxiety.

The Houston Mexican-American neighborhood is well-established, with fewer recent arrivals, higher rates of home ownership, and larger shares of households in which both parents are present than are other comparable barrios in the United States (HMS, Donato and Kanaiaupuni 1996). Nonetheless, it remains a poor community.

Within the larger neighborhood, the researchers began by defining areas (using census tract and block information) that contained high concentrations of foreign-born persons and persons of Mexican origin (HMS, Donato and Kanaiaupuni 1996). Once the boundaries for this more limited neighborhood were established, a list of all household

addresses was obtained from the U.S. Census Bureau, and a sample of 140 households was randomly generated from this list (HMS, Donato and Kanaiaupuni 1996).

INDEPENDENT VARIABLES

The independent variables included length of U.S. residence, the presence of family social support, and labor market experiences. The length of U.S. residence was measured by the number of months. To operationalize the length of U.S. residence, I combined the variables of the duration of current residence in the United States and first residence in the United States. I measured family social support by including answers regarding how many different kinds of relatives resided in the U.S., and how many of them visited the respondent in the past year. The list of relatives includes mother, father, brother, sister, uncle, aunt, mother-in-law, father-in-law, sister-in-law, and brother-in-law. Thus, if the respondent had her mother, father, brother, sister, and aunt living in the U.S., and the first four visited, her score would be nine. For labor market experience, I looked at the employment of the woman and her work history. More specifically, I examined separately “How many months R worked in last year?” and “Have you ever worked?.”

CONTROL VARIABLES

The control variables are age, years of education completed, marital status, total household income, religious beliefs, and number of children. To operationalize the respondent’s age, I subtracted the respondent’s birth year from the survey year. For the education, I used the total years of education. I measured the respondent’s monthly total household income by summarizing her partner’s income, the respondent’s income, the

children's contribution, other family's contribution, rental income, crop income, loan contributions, and any other additional income. I divided the marital status into "committed" (in a free union or married) and "not committed" (widowed, single, divorced, separated, or single) groups. For religion, I divided the respondents into "Catholic" and "Anon-Catholic" groups because the majority of women were Catholic. I measured the number of children by using the respondent's total number of children.

Although these variables do not test any of the hypotheses above, they should be included in the analysis so that the independent variables will reflect "net effects" of the mental health problems. I included age in my control variables because I expect that different age groups will have different mental health problems. I included education as a control variable because educational levels have been shown to be associated with depressive symptoms (Black et al. 1998; House et al. 1988; Morton et al. 1989; Vega et al. 1986). Previous research has also shown that married women have fewer mental health problems (Morton et al. 1989; Vega et al. 1986). I included total household income as a control variable because income has been negatively linked to depression (House et al. 1988; Morton et al. 1989; Vega et al. 1986). I added religion as a control variable because many of the women in my sample are Catholic and this may be related to their mental health status by having a network of people in their church to buffer mental health problems. Finally, I included the respondent's number of children to examine the relationship with their mental health problems.

DEPENDENT VARIABLES

The key dependent variable in this study is mental health problems. To measure these outcomes I use information from questions that asked about symptoms of depression such as feelings (sad, depressed, anxious, or worried), and loss of interest in activities. The three questions are; “During the past 12 months, have you ever felt sad, blue, or depressed?,” “During the past 12 months, was there ever a time lasting two weeks or more when you lost interest in most things like work, hobbies, or activities that usually give you pleasure?,” and “During the past 12 months, did you ever have a period lasting one month or longer when most of the time you felt worried or anxious?.” In order to operationalize these dependent variables, I dummy coded each of them into yes or no responses (yes=1, no=0).

ANALYTIC STRATEGY

In the descriptive part of the study, I first describe the percent of Mexican American women who are depressed and anxious. This will set the baseline for the subsequent analyses. For the major part of the data analysis, I use binary logistic regression to test my three hypotheses. Binary logistic regression is used when the “response variable has only two qualitative outcomes and can be represented by a dichotomous variable taking on values 0 and 1” (Neter et al. 1996). All of my dependent variables have either a yes or no response, so they were dummy coded (yes=1, no=0).

I have two models of logistic regression for each of the three dependent variables. The first model includes the predictor variables alone. The second model contains all the

variables, the predictors and the controls. The logistic regression outputs include a Pearson Chi-Square, a constant, degrees of freedom, standardized regression coefficients, standard errors, and sample size. For establishing statistical significance, I use both $p < .10$ and $p < .05$ because the sample size is extremely small. The Pearson Chi-Square is used to test the independence of a model (Agresti and Finlay 1997). For example, if the Pearson Chi-Square is significant, then there is greater evidence to accept the alternative hypothesis that the frequencies are dependent on each other and that the model is significant (Agresti and Finlay 1997). In order to make the comparison of relative importance of all the variables possible, I show standardized regression coefficients. If the coefficient is significant, then the relationship between the independent and dependent variables are statistically significant (Agresti and Finlay 1997).

Since the logistic regression output was missing a R^2 output, I calculated a Pseudo R^2 using the formula below (Aldrich et al. 1990). The Pseudo R^2 is the amount of variance explained by the independent variable (Aldrich et al. 1990).

$$\text{Pseudo } R^2 = \frac{\text{Observed Chi Square}}{\text{Chi Square} + \text{Sample Size (N)}}$$

FINDINGS

SAMPLE DESCRIPTION

Table 1 shows the women's average age was 44 years old, and that sample ranged from respondents who were 18 to 92 years of age. The women had an average of 6.2 years of schooling with the range from zero to sixteen years. The majority of women were married or in a free union (82 percent). Most of the women were Catholic (87 percent). The average number of children each respondent had was 3 with the range from zero to eleven. The average monthly household income was \$2970.81 with a range of \$500.00 to \$8160.00.

Table 2 describes the independent variables. The first independent variable is the total duration of residence in the U.S. (months). The average duration in the U.S. is 202.10 months or around seventeen years. The range of duration in the U.S. is from 11.00 months to 948.00 months or under a year to seventy-nine years. The second independent variable is family social support. On average, the women scored 8.88 out of a possible twenty on the family social support scale. The last two independent variables are the number of months the woman worked in the last year and whether or not she has ever worked. The average number of months the women worked in the past year is 4.03, but most of the women were not working at the time of the survey. The range of months the women worked are from zero to twelve. Around 72 percent of the women have worked in the past before the survey.

Table 1
Descriptive Statistics of Control Variables (N=89)

<i>Variable Description</i>	<i>Mean</i>	<i>Median</i>	<i>Standard Deviation</i>	<i>Minimum</i>	<i>Maximum</i>
<i>Controls</i>					
Age	44	42	16	18	92
Education	6.22	6.00	3.75	0.00	16.00
Household Income	2970.81	2800.00	1609.32	500.00	8160.00
Marital Status	.82	1.00	.39	0.00	1.00
Religion	.87	1.00	.34	0.00	1.00
Number of Children	3.43	3.00	2.40	0.00	11.00

Table 2
Descriptive Statistics of Predictor Variables (N=89)

<i>Variable Description</i>	<i>Mean</i>	<i>Median</i>	<i>Standard Deviation</i>	<i>Minimum</i>	<i>Maximum</i>
<i>Predictors</i>					
Total Duration in the U.S. (months)	202.10	175.00	170.82	11.00	948.00
Family Social Support	8.88	10.00	5.14	0.00	20.00
How Many Months R Worked in Last Year?	4.03	0.00	5.17	0.00	12.00
Has R Ever Worked?	.72	1.00	.45	0.00	1.00

Table 3 describes the three dependent variables. The first dependent variable is whether or not the respondent has ever felt sad or depressed in the past 12 months. On average, 38 percent of the women had felt sad or depressed in the past year before the survey. The second dependent variable is whether or not the respondent, over a period of two weeks or more, lost interest in activities that usually give them pleasure. An average of eight percent of the women lost interest in most activities that gave them pleasure. Finally, the third dependent variable is whether or not the respondent felt anxious or worried for a period lasting one month or longer in the past year. An average of seven percent of the women felt anxious or worried for a period of one month or longer in the past year.

REGRESSION ANALYSIS

Table 4 contains the results of regressing whether an immigrant woman had felt depressed in the past 12 months on the control and predictor variables. In the predictor only model, the family social support variable has a statistically significant impact on respondents feeling sad, blue, or depressed in the 12 months. The family social support variable remains statistically significant after adding control variables in the predictor and control model ($p < .05$). As I expected, respondents with increased levels of family social support were less likely to feel sad, blue, or depressed in the past 12 months. Another significant finding is the predictor model's Pearson Chi Square. The significant Pearson Chi Square translates to the entire predictor model being significant. However, after adding the control variables, the predictor and control variable model is not significant. Meanwhile, the pseudo R^2 for the predictor model stated that 10.1 percent of

Table 3
Descriptive Statistics of Dependent Variables (N=89)

<i>Variable Description</i>	<i>Mean</i>	<i>Median</i>	<i>Standard Deviation</i>	<i>Minimum</i>	<i>Maximum</i>
<i>Dependent Variables</i>					
During the past 12 months, have you ever felt sad, blue, or depressed?	.38	0.00	.49	0.00	1.00
During the past 12 months, was there ever a time lasting two weeks or more when you lost interest in most things like work, hobbies, or activities that usually give you pleasure?	.08	0.00	.27	0.00	1.00
During the past 12 months, did you ever have a period lasting one month or longer when most of the time you felt worried or anxious?	.07	0.00	.25	0.00	1.00

Table 4
 Logistic Regression of the Probability that a Mexican Immigrant Woman
 Felt Depressed in the Past 12 Months (* p < .10 ** p < .05)

<i>Variables</i>	<i>Predictor Model</i>	<i>Predictor and Control Model</i>
<i>Predictors</i>		
Total Duration in the U.S. (months)	.002 (.002)	.003 (.002)
Family Social Support	-.123 ** (.050)	-.140 ** (.055)
How Many Months R Worked in Last Year?	.027 (.048)	.033 (.052)
Has R Ever Worked?	-.754 (.519)	-.746 (.549)
<i>Controls</i>		
Age		.011 (.028)
Education		-.025 (.079)
Household Income		.000 (.000)
Marital Status		1.196 (.858)
Religion		-.638 (.703)
Number of Children		-.063 (.133)
<i>Constant</i>	.622 (.591)	-.114 (1.638)
Pearson Chi-Square	10.048 **	14.020
df	4	10
Pseudo R-Square	0.101	0.136
N	89	89

the dependent variable variance can be explained by the independent variables. Furthermore, the pseudo R^2 for the predictor and control model showed that 13.6 percent of the dependent variable variance was explained by the independent variables although it was not statistically significant.

Table 5 describes the dependent variable whether or not the respondent lost interest in most things like work, hobbies, or activities that usually give her pleasure for a period lasting two weeks or more and the predictor and control variables. In the predictor model, the two work variables were statistically significant in relation to respondents losing interest in activities but with different results. The variable number of months the respondent worked was in the predicted direction with increased number of months worked leading to increased likelihood of losing interest in most things. On the other hand, the higher levels of the respondent working in the past negatively affected losing interest in most things. The number of months the respondent worked last year and whether or not the respondent ever worked were statistically significant even after adding control variables in the predictor and control model ($p < .05$). The predictor model's Pearson Chi Square was also significant, which means the entire predictor model was significant. This relationship did not remain after control variables were added. Additionally, the pseudo R^2 for the predictor model stated that 8.5 percent of the dependent variable variance was explained by the independent variables. The pseudo R^2 for the predictor and control model described that 12.9 percent of the dependent variable variance can be explained by the independent variables.

Table 5
 Logistic Regression of the Probability that a Mexican Immigrant Woman Lost Interest in Pleasurable Activities for a Period Lasting Two Weeks or More (* $p < .10$ ** $p < .05$)

<i>Variables</i>	<i>Predictor Model</i>	<i>Predictor and Control Model</i>
<i>Predictors</i>		
Total Duration in the U.S. (months)	.002 (.002)	.000 (.004)
Family Social Support	-.018 (.085)	-.025 (.104)
How Many Months R Worked in Last Year?	.195 ** (.093)	.256 ** (.109)
Has R Ever Worked?	-2.254 ** (1.014)	-2.439 ** (1.126)
<i>Controls</i>		
Age		.028 (.051)
Education		-.151 (.136)
Household Income		-.000 (.000)
Marital Status		-.179 (1.494)
Religion		-1.154 (1.153)
Number of Children		-.148 (.235)
<i>Constant</i>	-2.379 ** (1.070)	-.256 (2.767)
Pearson Chi-Square	8.269 *	13.207
df	4	10
Pseudo R-Square	0.085	0.129
N	89	89

Table 6 describes the relationship between the dependent variable, whether the respondent felt worried or anxious for one month or longer and the predictor and control variables. For this dependent variable, I did not find significant predictor or control variables.

For each of the models, it is possible that the control variables are washing out some of the results. For example, in the predictor models of Tables 4-6, the significant Pearson Chi-Squares and constants were not significant after control variables were added. Another explanation is that the sample size (N) was so small, which is compounded by the fact that there are too many variables and not enough cases. Since it is unclear which of the two explanations, control variables or small sample size, was actually taking place, I assume that the small number of cases is substantively robust and that the variables were, in fact, substantively significant.

Table 6
 Logistic Regression of the Probability that a Mexican Immigrant Woman
 Felt Worried or Anxious for One Month or Longer (* p < .10 ** p < .05)

<i>Variables</i>	<i>Predictor Model</i>	<i>Predictor and Control Model</i>
<i>Predictors</i>		
Total Duration in the U.S. (months)	-.002 (.003)	.002 (.005)
Family Social Support	-.035 (.091)	-.041 (.101)
How Many Months R Worked in Last Year?	-.040 (.096)	-.069 (.106)
Has R Ever Worked?	-.092 (.948)	.248 (1.091)
<i>Controls</i>		
Age		-.070 (.057)
Education		.180 (.176)
Household Income		-.000 (.000)
Marital Status		-.444 (1.372)
Religion		-.092 (1.303)
Number of Children		.204 (.260)
<i>Constant</i>	-1.794 * (.987)	-.095 (2.942)
Pearson Chi-Square	1.050	4.541
df	4	10
Pseudo R-Square	0.012	0.049
N	89	89

SUMMARY AND CONCLUSIONS

The findings of this thesis are similar to those of existing research. There was a statistically significant negative relationship between family social support and feelings of depression. Family social support may buffer the harmful effects of immigrating to the U.S. Second, there were conflicting results for the employment variables, perhaps due to problems with the measurement of these variables. While both of the work variables were statistically significant, only one of them (number of months the respondent worked) was in the direction predicted by previous research. The other work variable (if the respondent ever worked) was negatively related to losing interest in previously pleasurable activities.

The first hypothesis was not supported by the regression analyses. I suspect there was a problem with the duration variable itself. The range of duration in the U.S. was from under one year to seventy-nine years, an extremely large span, with an average of sixteen years. Most likely, the acculturation effects were not salient because previous research used samples of recent immigrants, whereas my sample included those who had been here for up to seventy-nine years. Unfortunately, my sample was so small (N=89) that I could not analyze recent immigrants separately.

The findings support the second hypothesis that high levels of family social support are associated with lower levels of psychological distress. I found statistically significant results for the dependent variable, whether the respondent felt depressed in the past twelve months. These results remained even after adding the control variables to the model. This finding is consistent

with the literature that suggests social support is linked to better mental health. It is most likely that this is due to a buffering mechanism in such a stressful situations as immigrating to a new country. A potential problem with these data, however, lies in the indicators of family social support. I assumed with the feeling depressed variable that family visits were beneficial, when in fact they could have been detrimental to the respondent.

There is inconsistent support for the third hypothesis that employment is associated with high levels of psychological distress. I found statistically significant results for one dependent variable. Specifically, I found both employment variables were statistically significant ($p < .05$) for models (predictor, predictor and control) involving loss of interest and these variables remained significant after control variables were added. Unfortunately, only one of the work variables--the number of months the respondent worked--was in the predicted direction. Contrary to expectations, the other employment variable (ever worked) was negatively related to loss of interest. Most likely, the reason for this discrepancy is the construction of the employment variable. A question on the type of employment and job satisfaction might yield the expected results.

LIMITATIONS

This study has four major limitations, the nature of the sample, its small size, the nature of two of the dependent variables, and the measures of psychological distress that were employed. The first limitation is the nature of the sample employed, which made it difficult to capture acculturation effects in recent immigrants due to the wide range of respondents. The acculturation

research refers mainly to relatively recent immigrants, but the respondents in this study resided in the U.S. from under a year to seventy nine years (with an average of sixteen years). More recent immigrants should probably include respondents who have resided in the U.S. from a few months to a few years in order to capture acculturation differences.

Second, the small size of the sample made it impossible to separate out the more recent immigrants from those who had been here long. Third, two of the dependent variables are another major limitation of the study. The main problem with these variables is a small average percentage of respondents stating they had experienced these depressive symptoms. For example, an average of 8 percent of the respondents reported losing interest in activities that usually gave them pleasure. For the other, only 7 percent of the respondents felt worried or anxious. Thus, with a small percentage of respondents experiencing these symptoms, there is very little variance to explain.

Finally, the fourth limitation is the psychological distress measure employed. The mental health supplement was constructed so that if the respondent answered “no” to one question, they skipped several questions afterwards. Consequently, there were only three questions that had enough responses to be included as dependent variables. It would have been helpful if I could have used a more reliable depression scale such as the Center for Epidemiological Studies Depression Scale (CES-D). The CES-D was developed by the National Institute of Mental Health, and it consists of a twenty item scale in which the respondents reported depressive symptoms (Morton et al. 1989).

CONCLUSIONS

Despite its limitations, a major strength of this study is the focus on Mexican immigrant women. Women are underrepresented and marginalized in Mexican immigrant literature. This study examines the Mexican immigrant woman in the context of her environment, focusing on duration of stay, the existence of family social support, and labor market experience. The results of this study will be important for future studies on Mexican immigrant women.

SUGGESTIONS FOR FUTURE RESEARCH

In examining Mexican immigrant women's acculturation, future researchers should use an acculturation scale that includes factors such as the language spoken at home, consumption of ethnic foods, ethnic cultural events attended, and type of community (ethnic). These factors, as well as duration of residence in the U.S., are integral in understanding the process of an immigrant's acculturation. Perhaps this acculturation scale can be used to contrast and compare different immigrant groups.

In future studies, there should also be more specific questions on relationships with family members and family social support. Future studies should ask if the respondent feels like they receive social support from family members. Perhaps more open-ended questions would be appropriate to understand the social support network. Another potential issue is that it is assumed that having family members in the U.S. added to the respondent's family social support. This may not be the case if they do not get along with that family member.

Future studies should also inquire about the respondent's attitude towards working outside the home. Labor market experience involves more complex variables than whether the respondent ever worked and the number of months they worked. It is possible that Mexican immigrant women may have negative attitudes toward employment since they have been socialized to expect that women stay at home, do not work, or only work to supplement her husband's income during times of financial hardship (Kanaiaupuni 2000). Most likely, open-ended questions about cultural attitudes and beliefs regarding work outside the home would paint a better picture of Mexican immigrant women's labor market experiences.

Finally, future research should establish a baseline for the mental health of Mexican immigrant women. After establishing Mexican immigrant women's mental health status, researchers could then compare it to Mexican-American women in order to decipher differences between the mental health of immigrants and native-born. Furthermore, Mexican immigrant women's mental health status should also be compared to non-Mexican American women in order to examine whether Mexican immigrant women have special mental health needs that are not being addressed in the U.S. This research can be useful in exploring the willingness or unwillingness of certain women to utilize mental health services, and work toward the improvement of mental health service delivery.

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