Families Across Borders:
The Effects of Migration on Family Members Remaining at Home

A thesis submitted to the faculty of the University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of Master of Arts in the Department of Sociology.

Chapel Hill
2006

Approved by

Advisor: Ted Mouw

Reader: Barbara Entwisle

Reader: Jacqueline Hagan

ABSTRACT

ALEXIS SILVER: Families Across Borders:
The Effects of Migration on Family Members Remaining at Home
(Under the direction of Ted Mouw)

This paper examines the effects of migration on the well-being of migrants' family members remaining in the country of origin. Previous literature discusses the processes of family separation and adjustment to new surroundings as being very trying for immigrants in host countries, but very few studies address the effects of migration on family members in home communities. Acknowledging the hardships faced by family members of migrants remaining at home, I use the Mexican Family Life Survey to empirically assess the effects of migration on the emotional well-being of migrants' family members in Mexican communities of origin. Results indicate that the migration of close family members to the U.S., especially spouses and children, significantly increases the depressive symptoms and feelings of loneliness reported by family members remaining in Mexico. Women, especially mothers and wives, are the most adversely affected by family member migration.

ACKNOWLEDGEMENTS

I would like to acknowledge Ted Mouw, Jacqueline Hagan, and Barbara Entwisle for their extensive feedback and help throughout the writing process.

TABLE OF CONTENTS

Page

LIST OF TABLES

TABLE

LIST OF FIGURES

FIGURE

Overview

International migration has the potential to stretch families across vast geographic spaces. Despite these distances, communication technology helps families remain linked as social units within a transnational space. Familial links sustained across international borders, however, do not provide equal substitutions for the physical presence of family members within households or neighborhoods. Shifts in familial organization resulting from migration may have profound impacts on the psychological well-being of family members on both sides of the border.

The separation of family units due to migration may induce stressors that affect the emotional well-being of both migrants and their family members remaining in their countries of origin. A burgeoning literature on migration and mental health explores psychological effects of migration on migrants in receiving countries. Very little research, however, has addressed the psychological costs of migration on the family members of migrants that remain in home communities. Moreover, literature that addresses the financial impacts of remittances on home communities and families rarely incorporates psychological repercussions of family member migration. I fill this gap in the literature by focusing my research on the effects of migration on the emotional well-being of migrants' family members remaining in home communities.

Research examining the psychological impacts of migration has frequently assumed gender differences without systematically testing for them (Espin 1987, Espin 1999, Hondagneu-Sotelo and Avila 1997, Vega et al. 1987). These studies focus exclusively on

women in receiving areas, and therefore lack a comparative lens to examine gender differences between men and women. In a study comparing migrant men and women, Aroian et al. (2003) find that women report higher levels of distress (Aroian et al. 2003), but no studies that I have seen systematically examine the gender differences among women and men remaining in the country of origin. In this study, I review the relevant migration, mental health, and transnational literature, and build upon the concepts and hypotheses raised in previous studies to examine the impact of family member migration on a representative, non-clinical sample of men and women in Mexican home communities.

Since close to 10 percent of the Mexican population resides and works in the United States (Chiquiar and Hanson 2005: 241, Latapi 2004), the effects of emigration influence numerous public, private, national, regional and local institutions in Mexico (Smith 2006). As 80 to 85% of new Mexican immigrants cross the border without documentation (Passel 2005), familial separation is standard in what researchers are increasingly referring to as "a culture of migration" within towns that have high and sustained rates of out-migration (Kandel and Massey 2002). With so many families spanning two countries, repercussions of migration resound in both the home and host communities. Because the emotional well-being of a migrant's family has the potential to affect the mental health of the migrant, investigating the effects of family member migration on family members remaining in communities of origin completes the exploration of the entire transnational space, and is an invaluable addition to this body of literature.

Review of the Literature

Familial Involvement in Migration Decisions: Individuals migrate for a variety of reasons, including individual-level motivations and familial strategies. Until recently, much immigration theory and policy has been based largely on a neoclassical economics model of cost-benefit analyses that focuses upon the risks and costs of crossing the border, wage differentials between the home and potential host countries, the probabilities of employment in the home and host countries, and the psychological costs of migrating (Espenshade 1995; Massey et al 1993; Massey et al. 2002; Todaro and Maruzko 1987). Neoclassical models of migration examine patterns of individual assessments that ultimately result in a rational decision to migrate permanently.

Without negating the importance of individual actors, as put forth in the neoclassical economics model, the new economics of migration model (NEM) expands upon the neoclassical model by analyzing the effects of market conditions and community atmospheres on familial or household decision making. (Espenshade 1995; Durand et al. 1996; Lauby and Stark 1988; Massey et al. 1993; Taylor 1999). According to NEM theory, families respond to failures in market protections, such as a lack of insurance against economic instability, crop failures, or natural disasters, by sending one or more family member to a different country or region to work in an industry that offers protection against market failures. Additionally, migration decisions emerge as a means to get around market failures that impede people's access to credit. Higher wage opportunities in destination communities allow individuals to save money toward investments in their home communities, and send remittances back to their families. Finally, NEM situates familial or household units within communities, and discusses

relative deprivation and income disparities as motivating factors that increase the likelihood of migration.

According to NEM, income disparities between countries and within communities promote migration (Massey et al. 1993; Stark and Taylor 1989; Stark and Taylor 1991). The NEM model of migration explains increases in out-migration by describing how families without migrant relatives witness the economic gains that other families reap from migrant remittances. Although a household that does not send a migrant to the U.S. does not change its economic conditions, its relative standing in comparison to migrant-sending households within the neighborhood decreases. The relative decrease in economic status, thereby, gives the household an incentive to engage in a household migration strategy. By addressing familial strategies, NEM incorporates the importance of household or family units into the economic model of migration.

Critiques of NEM theory point out that family decisions are not always uniformly agreed upon by all family members, and that power structures within families may allow one member more control over family decisions than others. Patriarchal societies normalize practices that favor male household heads, and may prioritize their decisions to migrate despite potential feelings of dissent on the part of their wives (Hondagneu-Sotelo 1992). Household bargaining theories and feminist critiques of NEM emphasize that family and household members do not necessarily act as a unified body, and that there may be dramatic differences in the negotiating power and opinions of men and women within the household (Cerutti and Massey 2001; Fomby 2005; Grasmuck and Pessar 1991; Hagan 1994; Hondagneu-Sotelo 1992; Hondagneu-Sotelo 1994; Kanaiapuni 2000; Pedraza 1991; Tilly and Scott 1987). By assuming a unified household decision, NEM

does not acknowledge distinct priorities of different family members that frequently split along gender lines.

Other criticisms of household decision-making theories highlight an overemphasis on agency and rational choice models which either minimize or completely ignore the psychological and emotional costs of migration for both migrants and their home communities and families (Binford 2003). In his examination of migration and remittance behavior in Mexico, Binford stresses the interconnectivity of economic, social, and psychological repercussions of migration, claiming that economic consequences should not be examined in the absence of social repercussions of migration. Although communities and families may benefit from the remittances of international migrants, the psychological costs of familial reorganization and diminished populations may outweigh the benefits of migration.

Considerations of family units within an influential community environment have entered into other migration theories beyond NEM. Cumulative causation and network theories of migration also point to social ties and community surroundings as important influences on migration behavior (Massey 1990; Palloni et al 2001; Singer and Massey 1998). According to cumulative causation and network theories, migration increases exponentially as it becomes more normative, and experienced migrants help facilitate the migration process. Cumulative causation theory posits migration streams sustain themselves once they become firmly established within a sending community. Clearly, the initial decision to migrate, along with subsequent migration decisions, is not made in a vacuum. Moreover, the effects of migration upon families and communities may resound long after migrants leave their home communities.

Expected economic gains from migration will likely outweigh the potential psychological costs during the decision-making process, particularly in poor communities where migration is so prevalent that it has become a normative life event. Even in advanced market societies where additional income may not increase individuals' or families' chances of survival, or drastically alter the quality of their lives, the majority of individuals indicate that increases in wages will increase their life satisfaction. Additionally, individuals in market societies tend to pursue economic gain at the expense of family solidarity and personal intimacy (Lane 2000). In more dire situations where increased income is more of a necessity than a luxury, it is likely that economic influences will act even more persuasively on the decision-making process of migrants and their families. Although potential migrant-sending families may anticipate the emotional costs of migration (Vega et al. 1987), this expectation may not lessen the importance of the financial motivation to migrate.

In contrast to neoclassical and feminist household theories of migration, other models of migration do not address psychological costs, and instead focus more on cultural norms of migration. Theories of migration that are not based in rational choice models, such as cumulative causation and life course migration models, focus on normative practices that occur within migrant-sending communities with strong network ties to migrant receiving communities abroad (Massey 1999). In some communities, migration becomes an expected rite of passage or transition into adulthood. Parents of migrants may experience less psychological distress if they regard the migration of their adult children as a normal event within this stage of life.

Migration likely results from a mix of the aforementioned theories as they differentially apply to individuals and their families in distinct life situations and communities. Migration, particularly international migration, has the potential to induce considerable stressors on both migrants and their family members. For migrants, international migration poses challenges in the forms of unfamiliar language, culture, foods, and daily interactions. Migrants' family members remaining in the country of origin must adapt to lengthy separations from their loved ones, and may have trouble relating to the new lifestyles of their migrant relatives. Moreover, they may suffer from the uncertainty of future reunification due to the risk involved in crossing the U.S.-Mexico border. Conversely, migration may decrease familial stress by providing income for basic necessities and investments, or occasionally removing family members that add strain to familial relations from immediate participation in family interaction.

Ideally, families offer their family members psychological and emotional support, nurturing environments, and social integration (Midgley and Hughes 1997). Families, however, do not fit an ideal type and familial relations may be strained, or even hostile in more extreme circumstances. One study examined distinct familial situations in which the migration of fathers lead to improvements in the emotional well-being of remaining family members due to the disappearance of an argumentative or even abusive familial environment that dissipated with the migration of the father (Aguilera-Guzman et al. 2004). When migration is accompanied by the reduction in domestic violence or verbal abuse within the family, the separation of the family due to migration can actually decrease familial stress. Regardless of how, migration may dramatically affect both migrants and their families.

The Role of the State in Influencing Migration Patterns: Official recognition of the importance of families has emerged through the creation of family-specific provisions in immigration law. Since the implementation of the 1965 Amendments to the Immigration and Nationality Act, U.S. immigration policy has prioritized family members of U.S. citizens and legal immigrants. The 1965 Amendments created quotas for immigrants from different regions of the globe, and granted preferential entry to immigrants with familial links to permanent U.S. residents, particular occupational skills, or humanitarian needs. Quota requirements initially only applied to regions within the Eastern Hemisphere, but similar numeric restrictions were placed on Mexican immigrants in 1968. Immigration policies further emphasized the importance of the family by allowing spouses, parents and unmarried children of U.S. citizens into the U.S. without including them in the pool of immigrants allowed according to quota restrictions (Massey et al. 2002; Weintraub et al. 1997).

Despite the priority that U.S. immigration policy placed upon family reunification, the waiting list for family members of legal U.S. permanent residents was over seven years as of March 2005 for Mexicans applying under the 2A family member qualifications (U.S. Department of State Visa Bulletin 2005). Furthermore, continuously increasing border enforcement has made crossing the border a very difficult feat for an entire family of undocumented immigrants, and has vastly cut down on circular migration (Andreas 2000; Massey et al. 2002).

Literature indicates that increases in border enforcement, including the passages of Operations Gatekeeper and Hold the Line, have led to longer stays of undocumented migrants due to the increased costs of border crossing and increased chances of

apprehensions (Andreas 2000; Massey et al. 2002). Furthermore, because undocumented migrants are remaining in the U.S. for longer periods of time, they are increasingly bringing their spouses and children to the U.S. While not countering this assertion, the difficulty of border crossing would greatly inhibit the migration of the entire extended family network of undocumented migrants, due to the far greater risks associated with increasingly dangerous border crossings especially for children (Eschbach et al. 1999).

According to NEM theory, most international migrants do not intend to move permanently. Migrants move to diversify their familial risks and save enough money to remit to family members, or invest in a house, land, or other capital upon returning to their home communities (Massey 1999; Massey et al. 1993; Massey and Espinosa 1997; Massey et al. 2002; Stark and Taylor 1989; Taylor 1999). Since their ultimate goal is to better their standing in their own countries, most migrants would not want to relocate their entire families to the U.S. Migration intentions often change with extended amounts of time at the destination, but it would be highly unlikely that all or even most families would change their initial plans to move across an international border. Although some migrants opt to bring their families with them, many families remain in Mexico and endure the lengthy separations from their family members.

Stressors Affecting the Emotional Well-being of Transnational Families: Recent scholarly exploration identifies the family as a constantly changing entity without a traditional form, but stresses the influence of the family over individuals' economic and social status (Nicholson 1997; Midgley and Hughes 1997). Although families differ in form and size, Midgley and Hughes assert that families serve as "emotional and supportive network[s]" (1997:62). Midgley and Hughes place less emphasis on the

family composition (whether nuclear or extended, blood-related or socially formed), and instead focus on the functions that families provide for their members. Serving as units of social and emotional support, families ideally protect their members from experiencing dramatic psychological distress brought about by stressful life events. The Mexican family has traditionally been characterized by strong links to extended family members, and very close knit and supportive ties (Smith 2006). Shifts in familial organization, however, disrupt familial functioning, and can add to the stress induced by difficult life events. In the context of international migration, the stressors affecting family members on both sides of the border may include: separation, the breakdown of social support networks, and the addition of new roles and responsibilities.

Literature about transnational migrants suggests that many migrants do not leave their family members behind, but instead maintain their ties and allegiances to their home countries (Hondagneu-Sotelo and Avila 1997; Smith 2006; Schmalzbauer 2004) . Much of the transnational literature, however, refers to family members remaining in the home countries as "left behind" (Portes et al. 1999, Schiller and Fouron 1999, Schmalzbauer 2004, Vertovec 2004). The term "left behind" may be particularly inappropriate in the transnational literature that stresses the dual identity of migrants in host countries. Furthermore, even in Mexican communities where migration is extensive, evidence indicates that while high migration rates increase the chances of wanting to work in the U.S., this correlation does not exist as clearly for a desire to migrate to the U.S. permanently (Kandel and Massey 2002). Thus, while the term "left behind" connotes a likelihood of forlorn family members longing to join their loved ones in far away lands, representative data has yet to substantiate this claim. The break-up of migrant families,

however, causes stressors that affect the daily lives of both migrants and their family members.

Separation: Studies linking stressful life events and depression have found significant correlations between reporting a separation from a significant person and depression. (Aguilera-Guzman et al. 2004; Aroian et al. 2003; Maza 1997; Paykel 1970; Rodriguez et al. 2000; Suarez-Orozco et al. 2002). Examining migrant families in the U.S., Suarez-Orozco et al. (2002) focus on the issue of separation brought about by segmented, or stage migration. Stage migration refers to a gradual process of familial migration in which certain members of the family migrate first, and later send for their family members once they become established. Through their research with the Longitudinal Immigrant Student Adaptation Study, they find that adolescents who experience long periods of separation from their parents display higher levels of depressive symptoms than adolescent immigrants who are not separated from their parents, or who only experience short periods of separation from their families. Suarez-Orozco et al. identify stage migration as particularly disruptive to adolescents who, in additional to adapting to a new lifestyle and culture, have to endure two sets of traumatic separations; first from their parents, and later from the people who became their primary caretakers during the time that they were geographically separated from their parents.

Family members of migrants that remain in their home countries do not suffer the strains of having to adapt to a new culture themselves, but they may still experience heightened levels of stress and depression due to the separation from their migrant family members. One study of Honduran transnational families emphasizes the importance of communication in maintaining family ties across borders, but provides ample evidence of

stress that results from familial separation regardless of sustained communication (Schmalzbauer 2004). Although many respondents interviewed in the two year study discuss the economic benefits that in their minds outweigh the psychological and emotional costs of familial separation, others mention feeling abandoned or not understanding the reasons that their family members left without them.

Other studies have highlighted spousal separation, in particular, as a stressful situation for migrants in the U.S. (Rodriguez et al. 2000), and their family members remaining at home (Hondagneu-Sotelo 1992). In her field study of Mexican immigrant families, Hondagneu-Sotelo finds evidence of severe strains resulting from husbands' migrations. The women in the study had since joined their husbands in the U.S., but many of them spoke of the distress that accompanied long periods of separation from their spouses prior to migrating themselves. Emphasizing the severe distress felt by some respondents in her sample, she states "several women reported that they implored God to have the border patrol capture their husbands and send them back home" (Hondagneu-Sotelo 1992: 401). Most of the women in her study expressed emotions of sadness or loneliness in response to the migrations of their husbands, and for many women, it was their loneliness that led to their own decisions to migrate.

Spousal separation due to migration may also bring about improvements in the quality of life of family members on both sides of the border (Aguilera-Guzman et al. 2004; Foner 2005). In Nancy Foner's study of Jamaican immigrants in New York, she finds that several women who migrated without their husbands did so to assert their independence, and force a separation from their spouses (Foner 2005: 161). Spousal

migration, thereby, can reflect a wide variety of situations from household strategies discussed in NEM theory, to dissolutions of marriages at least in practice, if not legally.

Role Change and Role Addition: In addition to emotional strains resulting from familial separations, several studies of transnational families also address the stress that accompanies changes in familial roles (Hondagneu-Sotelo and Avila 1997; Schmalzbauer 2004; Aguilera-Guzman 2004). Similar to how the process of migration brings about new familial roles and relations (Foner 1997; Hondagneu-Sotelo 1992; Suarez-Orozco and Qin 2006), the out-migration of family members causes non-migrants remaining in the household to adjust to new roles and familial relations with their migrant relatives, and with each other. Studies examining family members of migrants that remain in the household of origin often focus on primary caregivers that stand in for migrant mothers (Hondagneu-Sotelo and Avila 1997; Schmalzbauer 2004). These studies employ Patricia Hill Collins' phrase "other mothers" in referring to the females that take on the nurturing role in place of biological mothers who have migrated away from their families (Collins 1991).

Adaptive behaviors are particularly salient for absent mothers, but every family member that leaves may have performed roles that remaining family members assume once a family member migrates. After migrating, the main income earner may continue to provide the chief source of familial income through remittances, but this was likely not his or her only role within the family. Upon migrating, other roles previously performed by current migrants must be supplemented by non-migrant family members.

The adoption of additional responsibilities to supplement the loss of migrant family members may be particularly stressful for mothers with dependents in the

household (Aguilera-Guzman 2004; Maza 1997). Although mothers most likely filled the role of care taker before their husbands migrated, they now have the strain of fulfilling this role without the emotional or physical support of the husband. In addition to taking on roles previously performed by fathers, mothers remaining at home often take on the responsibility of helping their children cope with paternal absence. Paternal migration is one example of extended paternal absence, but studies of families with fathers in the military or trucking industry have also demonstrated how mothers adopt roles of informal therapists and liaisons between children and their absent fathers (Blount et al. 1992; Zvonkovic et al. 2005).

The transfer of extra responsibility to remaining household members has the potential to spread beyond mothers to all members of the household. The findings of one study of paternal migration indicate that additional obligations placed on adolescents lead to increases in their stress levels (Aguilera-Guzman 2004). This study not only addresses the additional tasks undertaken by the adolescents, but also discusses mothers who act as both mother and father within the home. According to the study, the adoption of additional roles is particularly stressful when new responsibilities cross over traditional gender lines.

Breakdown of Support Structures: Research has shown social support, particularly in the form of close intimate relationships such as spousal relationships, to be a successful buffer against mental distress (Thoits 1995; Farrell and Barnes 1993). The separation of close family members, thereby, may also signify the breakdown of an individual's social support network. In the case of migration, the separation of migrants from their families is a stressful life event that severs the support network of both

migrants and migrants' family members. The strain of migration, therefore, immediately highlights breakdowns in support structures. Beyond the initial shock, however, daily life stressors may continue to cause exaggerated strain due to diminished support networks, particularly in the case of spousal migration.

Studies examining migrants separated from their spouses and children indicate these individuals experience greater levels of depression than those who migrate with their families (Rodriguez et al. 2000; Aroian and Norris 2003). Most studies stress the primary importance of spousal relationships, but other relationships throughout the lifecourse differentially affect individuals' support structures. Adolescents' support structures, for example, may suffer from paternal migration because of the loss of a primary advice-giver (Aguilera-Guzman 2004). Adolescents may be more affected by the migration of one of their parents due to their daily reliance upon them. In contrast, the absence of parental support may be less dramatic for adults who are not as reliant upon their parents, but instead focus on spousal relationships for social support. Other friends and relatives serve to buffer the effect of spousal separation, but these relationships are not as effective in providing outlets for support as this most intimate relationship (Cohen and Wills 1985; Thoits 1995). Although spousal relationships may be extremely important for social support, they may also be more vulnerable and changeable than other close relationships, and spousal migration may alternately bring about or arise from shifts in marital relationships.

Gender in the Mexican Case: Like other Latino countries, Mexico has a legacy of patriarchy that continues to influence the organization of households and the labor force throughout Mexico despite continuously narrowing gender inequality in both the public

and private spheres (Artico 2003; Fomby 2005; Kanaiaupuni 2000; LeVine 1993). Although early scholars may have overstated stereotypes of fathers characterized by machismo and highly authoritarian demeanors (Peñalosa 1968), most Mexican households emphasize women's central role as belonging in the home, while they place men in the public economic sphere (Artico 2003; Chant 1991; Fomby 2005; Kanaiaupuni 2000; LeVine 1993; Peña 1991). Because women in Mexico, as in the rest of the world (Fuwa 2004), do the vast majority of household labor, they would thereby inherit the household duties previously performed by familial household members that had migrated out of the household. If husbands migrate out of the household, their wives remaining in the household of origin may take on additional responsibility in the form of household decision-making which many may find empowering. When children or other household members migrate, however, women remaining in the household would be less likely to experience any increase in their household bargaining power.

Traditional gender roles within the household and in the labor force should not be overstated in the Mexican context as many Mexican women's autonomy and power within the household increased concomitant with their increasing participation in the labor force (Casique 2001; Fomby 2005). Women's entrance into the Mexican labor market, however, has largely been through informal labor arrangements out of the home, and as secondary income earners in flexible formal labor market jobs that experience high rates of turnover and frequently receive far less pay than typical male jobs (Chant 1991; González de la Rocha 1994; Kanaiaupuni 2000). Because of their more tenuous connection to the workforce and the strong cultural legacy of maternal and domestic emphasis placed upon women from a very young age, Mexican women continue to be

pushed into domestic spheres that center their lives around their homes and their families. Mexican men, in contrast, are more likely to have more social ties that extend beyond their families and their households. Of course, many women have social ties that extend beyond their homes and families, but men have more access to form social ties due to their primary position as economic providers.

Because Mexican women are more closely tied to their homes and their domestic duties, they are more susceptible than men to experiencing negative repercussions of familial separation, breakdown in support structures, and the adoption of additional roles and responsibilities that are associated with family member migration.

The data in this study do not allow for direct comparisons to families that have experienced the loss of a family member to internal migration, but the militarization of the U.S.–Mexico border has created a situation in which families with undocumented migrants become separated for far longer periods of time than families with migrants who are free to come and go without the stress of crossing a border illegally (Andreas 2000, Massey 2002). Although lengthy separations would decrease the immediate stress resulting from the adaptation period following the recent departure of a family member, the uncertainty of family reunification could continue to affect family members remaining in communities of origin even after the initial shock of separation has diminished. Even for legal immigrants with more opportunities to return home, cultural differences and potentially greater geographic distances would likely add more strain to familial interaction, and decrease the frequency of family visits.

Research on transnational communities has focused largely on ties to the home country within immigrant communities in host countries, without placing similar

emphasis on the communities in the home countries that are equally entrenched in the transnational network (Castles 2002; Guarnizo et al. 2003; Portes 2003). While transnational literature examines migrants' dual identities in transnational social spaces (Pries 2001; Smith 2006), most of the literature addressing individual reactions to migration has focused on the assimilation of permanent immigrants in the host country (Gordon 1964; Portes and Rumbaut 2001; Alba and Nee 2003). Transnationalism moves beyond assimilation theories to suggest sustained and active links between migrants and their support networks remaining in the home countries. Migration has become so prevalent in some communities that its effects are experienced almost equally by those remaining at home as by the migrants themselves (Massey and Kandel 2002; Smith 2006). The adaptation process thereby occurs not only for migrating individuals but also for their friends and families in their countries of origin.

Analytic Model

The separation of the family through the process of migration may strain, reorganize, and disrupt the family unit. As migration has become such a common economic strategy for many families throughout Mexico, however, I do not expect to find severely distraught non-migrant family members who feel "left behind." I do anticipate finding moderate levels of stress associated with familial separation due to migration. Although my data include all blood relatives living in the U.S., my main analysis focuses on the kinship ties of immediate family members including spouses, children, siblings, and parents. The model put forth in Figure 1 proposes that family-member migration leads to changes in the well-being of family members remaining in the home country (see Figure 1).

[Figure 1 about here]

I anticipate that having immediate relatives in the U.S. will affect the emotional well-being of non-migrants, but I do not expect this effect to be equally salient for all non-migrants with relatives in the U.S. I hypothesize that the effects of migration on emotional well-being will be dependent upon the type of relationship that the individual has with the migrant. I expect maternal relationships to show the greatest effect of migration on emotional well-being and loneliness, followed by spousal and child-parent relationships.

Additionally, I hypothesize that respondents who live in sending-communities with high rates of out-migration will display lower levels of emotional well-being than those coming from towns with less out-migration. Despite normative influences of cumulative causation or life course migration, I expect people, particularly women, remaining in communities with high rates of out-migration to respond to the emptiness not only within their families, but also within their towns. Conversely, non-migrants from communities with well-established migration traditions may have access to better infrastructure and resources to help them cope with family member migration.

I also expect the size of the family to affect depressive symptoms. The migration of one family member may be less stressful if there are several remaining family members in the household. The type of family members remaining in the household also affects the adaptation process to family member migration. I hypothesize that respondents from transnational families with dependents at home will experience greater emotional impacts of migration due to the additional responsibility that they need to adopt while learning to cope without the support of a close family member.

Not only do I expect the number of people remaining in the household to affect the emotional well-being of migrants' family members, but also the number of migrant relatives per family. If several members of the family are in the U.S., those remaining in Mexico may experience negative repercussions of family separation regardless of the size of their family (Schmalzbauer 2004). As some of the previous ethnographic studies indicate, relatives remaining in the home country may feel jealous of the opportunities given to their relatives. Conversely, non-migrants may be more able to cope with familial separation if migration is a common phenomenon, and if they understand its benefits.

Finally, I hypothesize that the effects of migration on emotional well-being will be strongest for women and adolescents as these groups have been shown to have higher levels of depressive symptoms than other members of the population. In the case of adolescents, they may suffer from the loss of a parental figure or older confidant within their household, and therefore miss the social support previously provided by their migrant relatives. Moreover, if one of their parents migrates to the U.S., they may suffer feelings of abandonment, particularly if they were young when their parent left or they did not fully comprehend the circumstances surrounding their parent's migration (Artico 2003).

With respect to women remaining in households of origin, they likely suffer more negative repercussions than remaining men because they would likely inherit any additional household responsibility left by migrant relatives, and because they would more acutely experience the loss of their family because of the centrality of family in most Mexican women's lives. As family is of paramount importance in Mexican and

other Latino cultures, men certainly value their family as well (Artico 2003; Kanaiaupuni 2000; Selby et al. 1990), but women's social roles generally provide them with fewer opportunities for social support outside of the family as compared to men.

Data and Methodology

Data: The data I analyze for this study is from the first wave of the Mexican Family Life Survey (MxFLS-1). The MxFLS-1 is a household survey that is representative at the national, urban-rural and regional levels. The first wave of data was collected between April and July of 2002, and was released in 2004. The second wave of data is scheduled for release in 2007. Based on the methodology of the Indonesian Family Life Survey (IFLS), the MxFLS-1 adapts the design of the IFLS to a Mexican context. The survey uses a probabilistic, multi-stage cluster design of 8,440 households within 150 communities located throughout Mexico. Within regions identified in the National Development Presidential Plan 2000-2006, the localities are chosen randomly. Within these localities, households are chosen randomly. Finally, the researchers interview all household members ages 15 and older, and conduct proxy interviews with parents of individuals younger than 15 within the sampled households. The qualification of being a household member is defined as any person who usually lives in the household regardless of blood or familial relations. For the purposes of this study, however, I limit my analyses to family members. The total number of individuals within the data set is approximately 38,000 including the approximately 19,800 interviewed respondents over the age of fourteen. I use list wise deletion to arrive at my final sample size of 19,665.

Descriptive statistics of sex and the number of migrant relatives reported by the sample are presented in Table 1.

[Table 1 about here]

To test for differences between families with migrant relatives and those without them, I rely on OLS regression to examine the emotional well-being scale, and ordered probit regression to examine loneliness. To more rigorously test the models, I employ a fixed effects model to control for variables, such as household income, that affect all family members equally. Eliminating the unobserved variables that influence all household members, as represented by θ in equation 1, allows for a more specific test of individual household members' emotional well-being (equation 2). By comparing individual level emotional well-being levels to the mean household emotional well-being level, the fixed effects model allows for a more direct analysis of each individual within the household. The regression and fixed effects models are represented by the following equations:

Eq 1: Emotional well-being, including unobserved and observed household-level variables:

$$EW = bM_1 + bM_2 + b_3X + \theta + E_{ij}$$

Eq. 2: Fixed Effects model for emotional well-being, eliminating household-level variables:

$$EW - \overline{EW} = b_1(M_1 - \overline{M}_1) + b_2(M_2 - \overline{M}_2) + \sum b(X - \overline{X}) + (E_{ij} - \overline{E}_{ij})$$

where EW signifies emotional well-being, M is signifies a migrant relative, X signifies the other control variables, θ signifies the unobserved household-level variables, and E signifies unobserved individual and household-level variables.

Measures

Dependent Variables: The emotional well-being scale I use in this study comes from the 21 question emotional well-being section in the MxFLS-1 (see Appendix: Table A1). The questions in the survey come from the Clinical Questionnaire for the Diagnosis of Depressive Syndrome (Cuestionario Clinico para el Diagnostico del Sindrome Depresivo [CCDSD]) that was designed and tested by the Mexican Institute of Psychiatry to assess depressive syndrome among the Mexican population (Calderon 1997). Many of the elements within the CCDSD are common to other widely employed scales such as the CES-D scale, the MacMillan Health Opinion Survey, the SCL 90 Scale, and the Langner Index Item Scale. Additionally, many of the questions within the CCDSD appear as symptomatic indicators of Major Depression and Dysthymic Disorder within the DSM-IV (DSM-IV 2000: 377). The cultural sensitivity of the scale increases its validity for use within the Mexican population in particular.

Calderon (1997) describes the advantages of the CCDSD in comparison to previously used scales such as the Minnesota Multiphasic Personality Inventory and Hamilton's and Zhung's scales. He points out that previous scales asked questions in various directions which often confused Mexican respondents, particularly those of low socioeconomic, and presumably educational, status. Further, he highlights a lack of symptoms within these scales that he finds particularly relevant to the Mexican population. He sites insecurities, neuroses, obsessive tendencies, and compulsive behaviors that affect appetite as missing from some or all of these surveys.

The emotional well-being section within the MxFLS-1 includes 21 questions, but only the first 20 are included in the CCDSD. Although, the final question, "In the last 4

weeks, have you felt lonely?" is not included in the general depression scale, I include it as a separate dependant variable because of its relevance to the absence of family members due to migration. Furthermore, the CES-D scale uses this measure of loneliness to address depressive symptoms in the depressive affect sub-section of the scale (Radloff 1977; Ensel 1986).

In contrast to the question of loneliness, the question, "In the last 4 weeks, has your sexual interest decreased?" does not have a clear connection to the experience of separation from a family member due to migration. Moreover, because of its very personal nature and the option of refusal to answer, the answers to the question display much lower response rates than the other questions within the scale. Thus, I exclude this question from the scale for this study.

The alpha reliability level among the items in the CCDSD is .86 (Calderon 1997). Each item on the scale has four possible answers, coded one through four, with responses ranging from "no" to "sometimes" to "most of the time" to "all the time." The Mexican Institute of Psychiatry identifies normal scores on the complete scale as falling between 20 and 35 (or 16 and 31 on the complete scale minus the sexual desire question), persons with some anxiety as having scores falling between 36 and 45 (32 and 41), persons displaying median levels of depressive syndrome as having scores between 46 and 65 (42 and 61), and persons displaying severe levels of depressive syndrome as having scores between 66 and 80 (62 and 76). Despite the suggestive name of the scale, these classifications are only meant to be the first step in identifying clinical depression. A complete diagnosis requires a much more intensive test (Calderon 1997).

Because all of the questions in the CCDSD scale are asked in the same direction, the scale does not account for positive affect, but has therefore reduced confusion for individuals of lower educational status. While this may inhibit the validity of the scale as a measure of depression (Ensel 1986; Radloff 1977), it does not affect the reliability of the scale. Thus, the levels of depressive symptoms within the population will be comparable from respondent to respondent. Furthermore, tests run by the Mexican Institute of Psychiatry found the CCDSD scale to be a valid measure of depressive syndrome for this population (Calderon 1997).

Recent studies of depression scales have suggested that people of different ethnic and socioeconomic status respond differently to particular questions within the scale (Perriera et al. 2005). In Perriera et al.'s study of the CES-D scale, they report that Mexicans, older individuals, and people of lower socioeconomic status are more likely to respond affirmatively to questions, thereby highlighting inconsistencies among respondents of different cultures. Although nationality distinctions do not apply to the instrument used in the MxFLS-1, the unidirectional questioning for the Mexican population seems to be an improvement over other instruments.

Many of the same items found in the CCDSD are also found in the description of depression in the DSM-IV. The DSM-IV classifies the symptoms of Major Depression and the less intense, but more chronic condition of Dysthymic Disorder as including at least two of the following: "poor appetite or overeating, insomnia or hypersomnia, low energy or fatigue, low self-esteem, poor concentration or difficulty making decisions, and feelings of hopelessness" (DSM-IV 2000: 377). As I am testing specifically for decreases in emotional well-being as a result of family member migration, I expect

slightly higher CCDSD scores as a reflection of higher scores on many of these items, but do not anticipate the higher scores to reflect diagnosable levels of depression described in the DSM-IV.

Examining the psychological impacts of migration on Latinas, one study emphasizes that reactions to migration, which manifest themselves in mood changes and depression, are not pathological conditions (Espin 1987). Although this study examines migrants and not their family members, the immigrants who sought psychotherapy frequently spoke of the loss of their loved ones, and of feelings of longing for their communities, families, and friends who remained in their countries of origin. Espin stresses that these feelings are normal reactions to the grieving process that immigrants go through while adjusting to their new lives and surroundings. She describes this reaction as "a moderate level of emotional disorganization which may be manifested by apathy, insomnia, loss of appetite, irritability, angry outbursts, psychosomatic symptoms and other signs of distress" (499). Espin's findings focus specifically around migrants' feelings of loneliness that can often become complicated with feelings of anger at the people whom the migrants have left, and subsequent feelings of guilt about their feelings of anger toward their loved ones (Espin 1987: 493-496). Although this study centers on immigrants who have moved away from their countries of origin, the loss of loved ones, and the feelings that accompany this loss, apply in part to family members of migrants remaining in their countries of origin as well.

Responding to the specific situation of family-member migration, I expect individuals with migrant relatives to report significantly higher CCDSD scores, but I do

not anticipate score differentials to place members of transnational families above the threshold of normal depressive symptom scores.

Independent Variables: The main relationship in question is whether the experience of having relatives in the U.S. affects non-migrants' emotional well-being. Thus, the first independent variable I use measures whether or not respondents have relatives in the U.S. with the question, "Do you have any relatives living in the U.S.?" If the respondents answered yes to this question, they were asked to further specify which relatives were living in the U.S. Respondents were allowed up to four relatives identified as, "spouse/couple; your father; your mother; your brother/sister; your son/daughter; your father/mother in law; your grandparents; your brother/sister in law; your grandson/granddaughter; your cousin; your uncle/aunt; your niece/nephew; or other relative (specify)." The classification of the type of relative allows me to test if the type of relation to the migrant affects the emotional well-being of the family members remaining in Mexico in any discernable way.

Because there is no indication of the level of closeness between non-migrants and their migrant relatives, I limit my analysis to mother, father, spouse, child, and sibling relationships. Certainly, the extended family network has a strong tradition in Mexico (Smith 2006, Artico 2003), but recent studies have also shown that Mexican families are increasingly living with immediate family members and apart from extended kin (Cerutti and Massey 2001). Although the assumption of closeness and/or former cohabitation is flawed, it is a safer assumption with these relatives than with the more distant relatives accounted for within the data.

By summing the number of relatives identified by the respondent, I am able to discern a measure of the number of relatives each respondent has in the U.S., and thus examine the effects of the number of migrant relatives on remaining family members in Mexico. I also measure the effects of the number of familial household members remaining in Mexico. Because previous literature suggests that there is a tipping point where the positive effects of additional household members reverse, I examine this variable as a categorical variable coded into households of one, two, three to five, or more than five members. I also analyze the effects of the presence of dependents, defined as children under the age of 15 or adults over the age of 65, on the emotional well-being of household members.

In addition to family variables, I examine two measures of community-level migration variables. The first measure is based on a report of a local municipality representative, and classifies the town as increasing or decreasing in size as a result of migration, or remaining the same size within the last five years. Because population shifts were based on a report of only one person, this measure may be prone to error. Moreover, the survey question does not ask the respondents to specify whether the migration is internal or international. As an additional measure of community level migration, I divide the number of relatives that each household identifies as living in the U.S. by the sum of family members remaining in the household, and their relatives in the U.S.

Finally, I control for age, socioeconomic status (SES), and educational attainment. I code age into categorical variables by teen, early adulthood, adulthood and senior age categories, thus reflecting rough measures of life stages. As most Mexicans do not move

out of their parents' houses until later than most American teenagers (DeVos 1995; Fomby 2005), I include the measure of early adulthood (20-24) to reflect a period of extended adolescence and transition into adulthood. Emotions about their family members' migration may be particularly stressed during this time of life as they themselves are considering different life pathways.

To assess SES, I create a measure of logged household income by aggregating individual incomes into a singular household income measure. In addition to income, I also examine total household consumption by summing household expenditures on food and basic necessities such as toothpaste and household cleaning products. Beyond reflecting a measure of SES, consumption patterns may also reflect the impact of remittances within the household. If families are making migration decisions based on household strategies, as asserted by NEM theory, then remittances should impact the amount of consumption within a household, and arguably reduce distress. Since previous research asserts that the majority of money remitted to families in Mexico from the U.S. goes toward consumption, particularly toward food, clothing, and shelter (Durand et al. 1996, Durand, Parrado and Massey 1996), calculating food and basic household provision expenditures should be the most sensitive measure of remittance impact, as opposed to other consumption measures including larger purchases such as cars and electronics. In order to account for diminishing returns on consumption and income, I log these variables.

I also examine whether families report having a savings as an additional measure of SES. Finally, I add a measure of whether the household has a telephone. This measure partially addresses SES, and also alludes to an ease of communication with

family members abroad in the U.S. I tested for differences in having a telephone in communities where very few people had a phone, as well as not having a telephone in communities where having a telephone was the norm, but these measures were not significantly different from the more simple measure of having or not having a telephone. Unfortunately, the data do not allow for measurement of individual mobile phone ownership or access to the internet. I therefore employ the dichotomous measure of telephone ownership within my analysis.

I examine education as a categorical variable separated into no education, less than a 7^{th} grade education, and 7^{th} grade or higher. For those respondents who do not report their level of education, I assign them the average household education level. If there are no other household members, I assign the respondents to the no education level.

Responding to criticisms that migration and psychological distress studies too frequently address gender only as a control variable (Curran et al. 2005; Suarez-Orozco and Qin 2006), I perform separate analyses for men and women. As women and men experience migration and depression differently, careful examination of gender is imperative in determining differential reactions to the migration of family members by gender. Additionally, feminist critiques of NEM theory imply that women may be less happy with their family members' decisions to migrate, particularly if their husbands migrate, or if their husbands support the migration decisions of their children but they oppose them (Hondagneu-Sotelo 1992).

In order to account for critiques of NEM theory that stress the possibility of differing opinions within households, I also examine married women's participation in household decisions. Because the household decision-making questions were only asked

of married couples, and because critiques of NEM emphasize women's disadvantage in power negotiations, I specifically examine the decision-making variable exclusively for married women. Although the survey does not enquire about migration decisions, it asks married respondents to report their participation in household decisions for twelve common household situations. I sum the number of decisions reported by the respondents, and code their responses into four ordered categories ranging from participation in 0-3 decisions as a minimum, and 10-12 decisions as a maximum. Although this is an imperfect measure of participation in the decision to allow a family member to migrate, trends in household decision negotiations may reflect power negotiations surrounding migration decisions.

Selection Issues: Because the data at this point is only cross sectional, I cannot address the issue of selectivity by examining shifts in emotional well-being over time. While it is possible that individuals' low levels of emotional well-being influence their migrant family members to leave, the data do not suggest this relationship. The MxFLS-1 asks respondents if they had ever thought about migrating. Of those individuals expressing a desire to migrate, only 6.91% indicate the desire for "independence from family" as one contributing reason for wanting to move, while about 7.84% cite being closer to family as a contributing reason for wanting to move (See Appendix, Table A2). Moreover, of those respondents that have already migrated either within Mexico or abroad but have since returned, only 1.19% indicate a desire to be independent from their family as the main reason for their previous migration (See Appendix, Table A3).

As independence from family does not necessarily denote negative feelings toward the family, this measure would only overestimate the measure of migrants who

move away from their families as a result of their family members' low levels of emotional well-being. While the cross-sectional data does not allow for thorough tests of internal validity within the causal model of migration leading to lower levels of emotional well-being in non-migrant family members, both previous research and the current data suggest that the relationship operates in this direction.

To further confirm the theoretical frame that family members of migrants experience declines in their emotional well-being as a result of the migration of their immediate family members and not the reverse, I examine a fixed effects model of families to ascertain if there are differences between the emotional well-being levels dependent upon the relation to the migrant in the U.S. As most migrants to the U.S. from Mexico leave their families and their countries in hopes of improving the qualities of their lives, low SES levels may account for lower levels of emotional well-being within families with migrant relatives. If low SES levels explained higher levels of depressive symptoms, however, this effect would arguably be either uniform or random for all family members within the household. In addition to controlling for the multi-stage cluster design that groups respondents in the survey by county and household, I also use a fixed effects model to determine if respondents with very close family members report higher levels of depressive symptoms than the rest of their family members in the household.

I expect adolescent children with parents in the U.S., younger parents with children in the U.S., and respondents with spouses in the U.S. to display levels of depressive symptoms higher than respondents without these ties to their migrant relatives.

Analytic Techniques

To best analyze the effects of the migration on family members, I perform OLS regression analyses including particular characteristics of the families and their communities. Because the dependent variables of the CCDSD is interpretable as a continuous scale, OLS regression is the most appropriate way to analyze the relationships between the independent variables and the emotional well-being of respondents.

As loneliness is the most immediate outcome of losing a close family member to migration, I employ ordered probit regression to examine the relationship between loneliness and family-member migration. After examining the relationship within the overall model, I examine the predicted probabilities of falling into each of the four categories of loneliness and sadness (the most direct single-item measure of depression related to family-member migration) dependent upon family member migration.

In order to account for the possibility that families with migrant relatives may be significantly more stressed due to financial strains than families that do not engage in migration as an economic strategy, I employ a fixed effects model for all families with two or more household members in them. This model controls for the average level of depressive symptoms of all familial household members, and tests whether particular relationships to migrant relatives are associated with significantly more or fewer depressive symptoms reported by the respondent.

Findings

Depressive Symptoms: Examining the relationship between family member migration and the CCDSD scale, the preliminary findings support the hypothesis that respondents with spouses, mothers and children in the U.S. are psychologically affected by the migration of their family members (see Table 2). In support of my hypothesis, these results were particularly

strong for child and spousal relationships. Although having migrant fathers does not show significant results for a difference in mean CCDSD scores, this could reflect a normalcy to the absence of fathers due to migration, or the centrality of women within Mexican families. Respondents with mothers in the U.S., conversely, report higher levels of depressive symptoms perhaps because this situation is less common. Interestingly, sibling relationships do not show significant effects for the overall population. Arguably, social support provided by siblings could be filled more easily by friends or other siblings remaining in Mexico. Parent-child relationships, however, are less substitutable even if a parent has more than one child. The results of the bivariate analysis support the importance of close, intimate relationships as social support structures.

Although the mean reported depression scores fall within the range specified as normal, the differences in scores between respondents with migrant relatives and those without migrant relatives are significant. Furthermore, the mean scores and the differences in mean scores are very similar to those found in other studies of depressive symptoms and stressful life events, including migration-related depressive symptoms, in non-clinical populations (Brown et al. 2004; Harker 2001; Simon 2002; Vega et al. 1987; Vuorenkoski et al.1998). Studies of emotional well-being in non-clinical samples rarely find effects of independent variables, such as stressful life events, that place individuals in the higher depression categories.

[Table 2 about here]

Controlling for other variables in the model, and examining the relationship between the CCDSD scale and having migrant relatives in the U.S. for males, only the relationship between having children in the U.S. remains significantly related to increases in depressive symptoms throughout all of the models (see Table 3). In the full model (model 5), men with children in the U.S. display an average of 1.1 more depressive

symptoms than men without children in the U.S., *ceteris paribus*. This relationship is significant at the .001 alpha level.[1]

Within the full model (model 5), logged household income and consumption are significantly and negatively associated with depressive symptoms indicating that as income and consumption increase, individuals report lower levels of depressive symptoms. Although having a savings operates in the same direction as these two SES measures, it does not add any significant, additional explanatory power to the model, thereby suggesting the importance of survival over economic luxury in affecting emotional well-being. Education operates in the expected direction, with increasing levels of education being associated with decreasing levels of depressive symptoms. The addition of the SES variables to the model (model 4) causes only a very slight change in the coefficient for having a migrant child. The effects of SES, thereby, do not seem to be enough to cushion the emotional repercussions of child migration.

The only other variables that significantly affect the variation in males' CCDSD scores are having dependants in the household, having additional numbers of migrant relatives, municipality migration rate, and age. Men with dependants in the household display slightly fewer depressive symptoms than men without dependants in the household (Models 3 and 5). As the number of migrant relatives increases, men tend to display higher levels of depressive symptoms (Model 3). The impact of having multiple migrant relatives could be due to the fact that these relatives often include children, but men may also feel less effective as providers if large proportions of their income are remitted from migrant relatives, or if they are comparing their own economic standings to their those of their adult

[1] Although 1.128 does not seem like a particularly large increase, the death of a family household member within the last 5 years is associated with a .267 increase in depressive symptoms for men, and a .428 increase in depressive symptoms for women on the CCDSD scale.

siblings or other relatives that may benefit from remittances. A 100% increase in out-migration is also associated with a 2.5 increase in depressive symptoms, offering slight support for the ghost town effect of migrant-sending towns, but a smaller increase in out-migration would have a far smaller impact. Finally, men in the oldest age category display an average of 1.5 more depressive symptoms than teenage males, *ceteris paribus* (Model 5).

Although adding socioeconomic and demographic variables to the model affects the coefficients for the family member variables, interacting household-level variables and migrant family member variables produces no significant results (model 3). These results suggest that the buffering effects of household characteristics are not sufficient to negate the negative impacts of family member migration on the emotional well-being of family members remaining at home.

[Table 3 about here]

The same analysis for women produces more significant indicators of depressive symptoms (see Table 4). The full model (model 5) offers the most explanatory power with an R^2 of .03. Although the R^2 value may seem slight, it is not dissimilar to other studies of non-clinical samples (Simon 2002), particularly given the fact that I do not employ sex as a control variable in the model. Of the family variables, child migration shows the strongest association with higher CCDSD scores. Although this association is similar to the male pattern (Table 3), the increase in CCDSD scores for women with migrant children, as opposed to women without migrant children, is much higher as the same increase for men. Women with migrant children display an average of 1.8 more depressive symptoms than women without children in the U.S., *ceteris paribus* (Table 4, model 5). Similar to the men

in the sample, increasing numbers of migrant relatives for female respondents are associated with increasing CCDSD scores (Model 3). Unlike men, having siblings in the U.S. is also significantly associated with increases in CCDSD scores for women.

Of the SES variables, logged household income, having a savings, education level, and having a telephone in the house are also significantly associated with lower CCDSD scores for women (model 5). Similar to men, the addition of the SES variables to the model (model 4) does little to reduce the impact of having a migrant child. Finally, respondents between the ages of 20 and 24 do not significantly differ from teenage respondents in their reported levels of depressive symptoms. Contrary to my hypothesis, however, respondents in each of the two older categories report more depressive symptoms than the younger age categories. These results indicate a gender difference between women and men between the ages of 25 and 64. As Mexican women have traditionally held less autonomy than Mexican men, the gender distinction may be picking up on household arrangements and labor opportunities that offer men far more independence than women. Furthermore, women as young as their 40s have reported being overlooked for local labor opportunities that favor younger women (Chant 1991; Gill 2006).

Despite women's more central role in the home and within the family, none of the tested interactions (model 3) produce significant results. The lack of significant interactions again suggests that having a telephone and additional family members within the household do not negate the stresses of having migrant family members.

[Table 4 about here]

Loneliness: Examining the table for males and loneliness, many of the same patterns for males and depressive symptoms reappear (see Table 5). AIC measures reveal

the full model (model 5) to offer the most explanatory power. Interestingly, male respondents with siblings in the U.S. are significantly less likely to be lonely than respondents without siblings in the U.S. As over 90% of respondents with siblings in the U.S. live in households with two or more household members, this measure may be picking up on the more extensive social networks of these respondents. Unlike the CCDSD measure, having a child in the U.S. does not result in a higher likelihood of male respondents to report higher levels of loneliness than male respondents without children in the U.S.

Logically, as the number of household members increases, men are significantly more likely to report lower levels of loneliness. Having dependants in the household, however, is not significantly associated with reported loneliness levels. Household income, increasing levels of education, and having a telephone are also significantly associated with decreased levels of loneliness for male respondents in model 5.

Similar to the measure for depressive symptoms, respondents in the oldest age category are more likely to report higher levels of loneliness than teenage respondents. Male respondents in the 25-64 age category, however, are more likely than teenagers to report lower levels of loneliness than teenagers, perhaps because older individuals have more secure friendship networks or are simply in a less transitional life stage.

[Table 5 about here]

In contrast to the men, women with spouses, mothers, siblings and children in the U.S. are significantly more likely to report higher levels of loneliness than women without these relatives in the U.S. This association is strongest for women with spouses in the U.S., with a coefficient of 0.44, significant at the 0.001 level (Table 6, model 5).

Similar to the men, women living in households with increasing numbers of household members are significantly less likely to report higher levels of loneliness than women living alone. Additionally, increasing levels of household consumption and education, and household savings and telephone ownership are all significantly associated with increased likelihood of reporting lower levels of loneliness. Finally, women in the highest age category are significantly more likely to report higher levels of loneliness than teenage women. Differing patterns between men and women in the sample suggest clear differences in reactions to family member migration by gender.

[Table 6 about here]

Depressive Symptoms and Household Decision-Making: Examining the relationships among participation in household decision-making, family member migration, and depressive symptoms, I find limited support for household bargaining theories (see Table 7). Although reporting participation in more household decisions is significantly associated with reporting fewer depressive symptoms (models 2-4), the addition of the household decision-making variable within model 2 does little to affect the coefficient for having a child in the U.S. (model 1). Additionally, interactions between having a child in the U.S. and participation in household decisions do not indicate that these variables are significantly related to increases in depressive symptoms. Having a child in the U.S., thereby, seems to affect all women regardless of the power dynamics within the household, suggesting strong mother-child attachment in various types of Mexican households. Interestingly, married women, on average, differ from all women in that they are only significantly affected by the migration of their children, and

not by other relatives in the model. These results are thereby consistent with the idea of the centrality of the mother role within Mexican families.

[Table 7 about here]

Fixed Effects Model: To verify that the results of the OLS and probit regression models are not reflecting selection effects wherein families with lower levels of emotional well-being are more likely to have migrant relatives due to higher levels of financial strain, I impose fixed effects models on the reduced depression scale and the loneliness measure (see Table 8). Although I already control for the stratified sampling survey design within my primary statistical analysis, I impose this additional analysis to more rigorously test the data. By comparing individual-level depressive symptoms to household mean depressive symptoms, the fixed effects model essentially controls for both observed and unobserved household level variables, thereby isolating the individual and his or her relationship with the migrant relatives. The results of the CCDSD scale indicate that after controlling for the average depression levels of family household units, female respondents with children in the U.S. still display significantly higher levels of depressive symptoms than other respondents within their households. The results, however, are not significant for males implying that men are less negatively affected by the migration of their children, or that the fixed effects model ignores the men who live alone and are thereby arguably the most like to be loneliest. The fixed effects model for loneliness does not indicate any significant variation within the household, but as fixed effects models necessitate households with more than one family member, the sample does not include individuals living alone or with children under the age of 15. The results, therefore, may not accurately reflect the loneliness levels of female respondents

with spouses in the U.S., as only 142 out of the 245 women with spouses in the U.S. live in households with two or more household members above the age of 14. The women omitted from the fixed effects model would be the most likely to display higher levels of loneliness.

[Table 8 about here]

Predicted Probabilities of Sadness and Loneliness: Focusing on the effects of the familial relationships most strongly associated with decreases in emotional well-being, I examine the predicted probabilities of reporting increasing levels of sadness as related to child migration, and increasing levels of loneliness as related to spousal migration (see Figures 2 and 3). The relationship of child migration and sadness reveals large differences in the predicted probabilities of sadness within the two least severe categories of sadness (see Figure 2). Men, both with and without children in the U.S., are more likely to report the lowest level category of sadness than any of the higher categories of sadness. Men with children in the U.S., however, are more likely to report each of the higher (or sadder) categories of sadness than men without children in the U.S., holding all of the other measures at their means. Unlike men, women with children in the U.S. are actually more likely to report the second lowest (or sadder) category of sadness as opposed to the lowest level category of sadness, holding all of the other measures at their means. Women with children in the U.S have a 0.47 probability of reporting the second category of sadness as compared to a 0.42 predicted probability of reporting the lowest level of sadness. Finally, men with and without migrant children are about 20% more likely than women with the same attributes to report the least severe category of sadness.

[Figure 2 about here]

Because there are not enough men in the sample with wives in the U.S. to make any claims about this population, I examine the predicted probabilities for loneliness and its relations to having a spouse in the U.S. for women only. In accordance with prevailing theory, females with spouses in the U.S. have the lowest predicted probability of reporting the lowest level category of loneliness, and the highest predicted probabilities of reporting all higher (or lonelier) level categories of loneliness, holding all of the other variables at their means. Women with spouses in the U.S. have a .50 predicted probability of reporting the lowest category of loneliness. They are about 15% less likely to be in the lowest category of loneliness than women without spouses in the U.S.

Despite a considerable difference between women with and without migrant husbands, all respondents are more likely to report the lowest level of loneliness on average than any of the higher categories of loneliness, holding all of the other measures at their means. The order of the predicted probabilities for each category of respondents reverses itself from category one (the lowest level of loneliness) to category two, and remains in this reversed order throughout the two highest categories of loneliness. The likelihood that any respondent will report levels of loneliness in either of the two highest categories is less than 10%.

[Figure 3 about here]

The data suggest clear associations between spousal absence due to migration and increased levels of loneliness for women, and child migration and increased levels of sadness for both men and women. The strongest effects, however, occur between the lowest and second to lowest categories of loneliness and sadness, with very few

respondents reporting the highest two levels of loneliness or sadness. These results indicate that while spousal and child migration impact the reported well-being of respondents, the migration of these family members is not normally associated with severe or debilitating levels of loneliness or sadness. The predicted probabilities for loneliness and sadness reiterate Espin's assessment of reactions to migration as "moderate" emotional shifts (1987: 499). It is important to remember, however, that the observed sample is not a part of any clinical study, and the majority of respondents are not clinically depressed. Results appearing within the two lowest categories of sadness and loneliness, thereby, should be expected and shouldn't be overlooked as unimportant.

Discussion

The findings of this study clearly suggest that migration has marked psychological repercussions not only for migrants, but also for their family members who remain at home. While the data do not allow for distinctions between documented and undocumented migrants or the length of time that families have been separated from their close relatives, the results of this limited analysis suggest that separations from close family members generally have negative effects on the emotional well-being of migrants' family members.

The psychological impacts of migration appear to affect women far more than men. Child migration shows the strongest associations with increases in depressive symptoms for both men and women, but the effect is nearly twice as large for women. In contrast to the more direct depression measures, the results of the loneliness model indicate a stronger effect for spousal absence than child absence. This result is only

applicable to women, as there are only 18 men in the sample with spouses in the U.S. The reversal of the significance for the migrant spouse variable between the depression and loneliness analyses implies differential emotional effects of migration depending on different types of familial relationships to migrants. Recalling Foner's discussion of the various motivations for separate spousal migration, spouses would migrate alone either with the intention of reunification, or as a mechanism of bringing about a purposeful separation (Foner 2005). Thus, the insignificant association between spousal migration and depression may reflect the variation of people's life situations. The larger effect of spousal absence on loneliness versus general depressive symptoms implies that spouses are more important as companions, and bastions of social support than other family members. Conversely, the significant associations between depression and parent-child relationships may reflect more altruistic relationships in which parents want to provide the best possible lives for their children. It is possible that parents suffer emotional consequences if they feel that they have failed in providing their children with ample life opportunities, or if they simply miss seeing their children and suffer from the long separations that families with undocumented migrant relatives must frequently endure.

The strengths of spousal and child relationships in particular suggest that the loss of family members to migration is the most traumatic when family members provided some level of social support, or played a role that would have been much harder to substitute with friends or remaining family members. Although maternal relationships would not likely be easily substitutable, perhaps the presence of "other mothers" would help to offset negative effects of the loss of a mother to migration. Further, because the survey did not question children under the age of 15 about their emotional well-being, the

effects of parental absence may be muted in this sample as it is likely easier for adult children to carry out daily routines without the input or presence of their parents.

The gender differences in the associations of having migrant relatives and emotional well-being reflect the greater importance of familial networks for women than men. Though some of this difference may be attributable to reporting biases in which women are more likely than men to report depressive symptoms (Sigmon et al. 2005; Vredenburg et al. 1986), the results suggest the family member migration impacts the well-being of women far more than that of men. Emotional repercussions of family member migration are greater for women than men, in both magnitude and quantity. Men's well-being, conversely, only shows significant associations with child migration. The large effect of gender, absent any associations with household decision making patterns, implies that regardless of individuals' initial feelings about the migration of their family members, women have a harder time coping with the loss of their relatives than men. This effect may be largely attributable to traditional household and labor market arrangements that situate women primarily in the domestic sphere, and most centrally in the mother role, and men primarily in more public positions.

Associations between family member migration and emotional well-being, particularly for women, reiterate previous claims that the positive economic repercussions of migration should not be overemphasized without simultaneous exploration of the psychological costs of migration (Binford 2003). The results of my analyses indicate that even in the case of Mexico, where migration is extraordinarily common, migrants' family members suffer from the absence of their family members.

Conclusions

Because such a large percentage of the Mexican population resides outside of Mexico, the effects of migration must be more carefully examined within the population remaining in Mexico. Family members of migrants that remain in the country of origin have been largely neglected in the literature addressing the effects of migration. The neglect of this population becomes particularly glaring in contrast to literature regarding decisions to migrate, which includes family members as relevant and prominent actors in migrants' decision-making processes.

With few exceptions (Binford 2003, Gill 2006, Schmalzbauer 2004), research addressing stresses associated with migration have largely neglected migrants' family members remaining in communities of origin. Given the current attention paid to transnationalism, it is imperative that researchers address the population of non-migrants with familial connections to migrants as active players in transnational communities. In order to most comprehensively examine the effects of migration on sending communities in developing countries, the economic impacts of family member migration should not be prioritized at the deficit of psychological impacts. Both financial and emotional consequences of migration are necessary avenues of investigation into migrant-sending families and communities, and future research should aim to address the impacts of migration with a more well-rounded approach.

Once migrants travel across the border, their families do not cease to be active influences in their lives. Current communication technology such as telephones, telephone cards, and email help sustain transnational communities of migrants and their non-migrant family members, and facilitate the ease of communication within families

that span international borders. While global information technology and commercialism allow separated families to be more in touch than ever before, the influences of family members also become more immediate than in previous migration waves. The emotional distress of family members remaining at home, thereby, may have more of an effect over the emotional well-being of migrants and vice versa. Although telephone ownership mitigates the negative effects of family member migration to some extent, it is not enough of a protective factor to negate the emotional repercussions of family member absence. Furthermore, interactions between having migrant relatives and owning a household telephone show no indication that telephone communication in any way replaces the absence of migrant family members.

To better assess the direction of the association between family member migration and emotional stress, further tests regarding the amount of money remitted to the family, better analyses of migrant sending-town atmospheres, reported levels of depressive symptoms and loneliness prior to the migration of a close family member, and the length of the separation among families and their migrant relatives should be examined. Finally, comparisons between internal and international migration would indicate whether increases in border enforcement and lengthier separations of families have led to increases in depression and loneliness on the part of family members remaining in their communities of origins.

The current militarization of the border between Mexico and the U.S. creates a situation in which many families with migrant relatives must restructure their relationships with one another exclusively around distanced communication rather than face to face interaction. As border enforcement increases, so too does the length of stay

for undocumented migrants in the U.S. Mothers, fathers, children, and siblings may be separated from each other for five, ten, or even over twenty year time periods. The results of the analysis suggest that the effects of family separation are emotionally trying for families, and particularly for women. In creating border and guest worker policies that make it difficult for families to remain together, it is important that policy makers fully understand all the effects of these policies not only on migrants, but also on the family members of migrants that remain in the country of origin.

The evidence presented in this paper suggests clear associations between the migration of close family members, particularly spouses and children, and decreases in the emotional well-being of migrants' family members. These results indicate a need for support programs, particularly for women, within migrant-sending towns. The creation of support groups for women with migrant relatives, and communication centers facilitating better communication between migrants and their relatives at home would fulfill important needs within migrant-sending and receiving communities. To this end, churches, government agencies, and local leaders within communities should act to create programs and centers to help community members cope with the absence of their family members. Although family reunification is the ultimate goal for many transnational families, programs addressing separated families certainly have a place in both sending and receiving communities.

Table 1: Descriptive Statistics of Sex and Relatives in the U.S. (N=19,665)

Relative	***Male***		***Female***		Total	
	In U.S.	**Not in U.S.**	**In U.S.**	**Not in U.S.**	**In U.S.**	**Not in U.S.**
Spouse	18 (0.21)	8,729 (99.79)	245 (2.24)	10,673 (97.76)	263 (1.34)	194,402 (98.66)
Child	529 (6.05)	8,218 (93.95)	738 (6.76)	10,180 (93.24)	1,276 (6.44)	18,398 (93.56)
Father	125 (1.43)	8,622 (98.57)	151 (1.38)	10,767 (98.62)	276 (1.40)	19,389 (98.60)
Mother	37 (0.42)	8,710 (99.58)	88 (0.81)	10,830 (99.19)	125 (0.64)	19,540 (99.36)
Sibling	1,133 (12.95)	7,614 (87.05)	1,516 (13.89)	9,402 (86.11)	2,649 (13.47)	17,016 (86.53)
	8,747		**10,918**		**19,665**	

Table 2: Bivariate Analysis of Emotional Well-being by Type of Relative (N=19,665)

Type of Relative in the US	***Emotional Well Being: Depressive Symptoms***		***Difference in Means***
	Has Relative in US	**Does Not Have Relative in US**	
Any Relative	25.967 *(7,028)*	25.082 *(12,637)*	0.886***
Spouse	27.703 *(263)*	25.367 *(19,402)*	2.337***
Father	26.120 *(276)*	25.388 *(19,389)*	0.732
Mother	27.260 *(125)*	25.386 *(19,540)*	1.894**
Sibling	25.573 *(2,649)*	25.371 *(17,016)*	0.202
Child	27.662 *(1,267)*	25.242 *(18,398)*	2.420***

*p < .05, **p < .01, ***p < .001 (two-tailed test)
Mean CCDSD score, frequencies in parentheses

Table 3: OLS Regression of Emotional Well-being by Relative Type and Other Socio-Demographic Attributes (Males: N=8,747)

	Model 1	Model 2	Model 3	Model 4	Model 5
	Depressive Symptoms				
Spouse	2.627 (1.445)	2.564 (1.493)		2.678 (1.486)	2.526 (1.511)
Father	0.462 (0.558)	0.533 (0.559)		0.398 (0.550)	0.470 (0.552)
Mother	-0.153 (1.165)	-0.050 (1.162)		-0.094 (1.122)	0.013 (1.143)
Sibling	-0.252 (0.163)	-0.158 (0.165)		-0.141 (0.164)	-0.134 (0.165)
Child	1.788*** (0.279)	1.235*** (0.290)		1.533*** (0.279)	1.128*** (0.291)
Number of Relatives			0.349** (0.079)		
Household Members			-0.071 (0.049)		-0.438 (0.296)
Dependants in HH			-0.456* (0.228)		-0.485* (0.212)
Logged HH Income				-0.212** (0.061)	-0.200** (0.062)
Logged HH consumption				-0.369*** (0.087)	-0.321*** (0.088)
Has Savings				-0.230 (0.142)	-0.236 (0.142)
< 7^{th} Grade (omitted none)				-0.922*** (0.161)	-0.752*** (0.159)
≥ 7^{th} Grade				-1.120*** (0.204)	-0.932*** (0.203)
Has Telephone			-0.692 (0.139)	-0.213 (0.141)	-0.256 (0.141)
Migration Rate					2.472** (0.736)
20-24(omitted 15-19)		0.003 (0.196)			0.062 (0.198)
25-64		0.151 (0.142)			0.223 (0.148)
65-100		1.907*** (0.261)			1.521*** (0.261)
Migrant Relative			-0.645 (0.418)		
Relative x HH number			0.178 (0.130)		
Relative x Dependent			-0.495 (0.478)		
Relative x Telephone			0.237 (0.308)		
Constant	23.504*** (0.067)	23.244*** (0.126)	23.924*** (0.175)	27.654*** (0.590)	26.412*** (0.607)
Observations	8747	8747	8747	8747	8747
R-squared	0.01	0.02	0.01	0.02	0.03

Robust standard errors in parentheses
*p < .05, **p < .01, ***p < .001 (two-tailed test)

Table 4: OLS Regression of Emotional Well-being by Relative Type and Other Socio-Demographic Attributes (Females: N=10,918)

	Model 1	Model 2	Model 3	Model 4	Model 5
	Depressive Symptoms				
Spouse	0.892 (0.465)	0.973* (0.466)		0.898 (0.470)	0.612 (0.475)
Father	0.885 (0.583)	1.314* (0.581)		0.909 (0.582)	1.033 (0.586)
Mother	1.841* (0.853)	1.682* (0.842)		1.836* (0.845)	1.406 (0.843)
Sibling	0.568** (0.208)	0.640** (0.209)		0.701** (0.207)	0.445* (0.218)
Child	2.763*** (0.320)	2.198*** (0.330)		2.565*** (0.320)	1.768*** (0.338)
Number Migrant Relatives			0.450*** (0.103)		
Household Members			-0.170** (0.059)		-0.009 (0.058)
Dependants in HH			-0.793** (0.258)		-0.859** (0.293)
Logged HH Income				-0.194** (0.073)	-0.199** (0.074)
Logged HH consumption				-0.214 (0.111)	-0.138 (0.113)
Has Savings				-0.520* (0.208)	-0.473* (0.209)
< 7^{th} Grade (omitted none)				-0.887*** (0.181)	-0.661*** (0.183)
≥ 7^{th} Grade				-1.044*** (0.221)	-0.900*** (0.221)
Has Telephone			-1.103*** (0.169)	-0.729*** (0.174)	-0.836*** (0.174)
Migration Rate					3.934** (0.903)
20-24(omitted 15-19)		-0.149 (0.248)			-0.138 (0.249)
25-64		0.891*** (0.185)			0.941*** (0.195)
65-100		2.524*** (0.321)			2.030*** (0.334)
Migrant Relative			0.558 (0.458)		
Relative x HH number			0.045 (0.135)		
Relative x Dependent			0.247 (0.551)		
Relative x Telephone			0.073 (0.358)		
Constant	26.533*** (0.081)	25.787*** (0.170)	27.423*** (0.200)	29.717*** (0.715)	27.949*** (0.754)
Observations	10918	10918	10918	10918	10918
R-squared	0.01	0.02	0.02	0.02	0.03

Robust standard errors in parentheses
*p < .05, **p < .01, ***p < .001 (two-tailed test)

Table 5: Ordered Probit Regression of Loneliness by Relative Type and Other Socio-Demographic Attributes (Males: N=8,747)

	Model 1	Model 2	Model 3	Model 4	Model 5
			Loneliness		
Spouse	0.179 (0.339)	0.198 (0.349)		0.212 (0.343)	0.222 (0.358)
Father	0.079 (0.117)	0.079 (0.119)		0.054 (0.117)	0.011 (0.119)
Mother	0.055 (0.225)	0.085 (0.226)		0.047 (0.221)	0.040 (0.224)
Sibling	-0.143** (0.048)	-0.109* (0.048)		-0.116** (0.048)	-0.118* (0.051)
Child	0.173** (0.059)	0.056 (0.063)		0.121* (0.060)	0.024 (0.066)
Number of Relatives			0.020 (0.016)		
Household Members			-0.069*** (0.086)		-0.058*** (0.090)
Dependants in HH			0.041 (0.058)		0.085 (0.059)
Logged HH Income				-0.053*** (0.015)	-0.040*** (0.015)
Logged HH Consumption				-0.061** (0.022)	-0.029 (0.022)
Has Savings				-0.006 (0.044)	-0.027 (0.044)
$< 7^{th}$ Grade (omitted none)				-0.189*** (0.038)	-0.143*** (0.038)
$\geq 7^{th}$ Grade				-0.255*** (0.052)	-0.186*** (0.053)
Has Telephone				-0.065 (0.038)	-0.076* (0.039)
Migration Rate					0.211 (0.182)
20-24(omitted 15-19)		-0.003 (0.059)			-0.001 (0.060)
25-64		-0.040 (0.042)			-0.095* (0.044)
65-100		0.395*** (0.059)			0.265*** (0.062)
Cut Point 1	0.927	0.945	0.729	0.148	0.268
Cut Point 2	1.828	1.856	1.633	1.058	1.190
Cut Point 3	2.200	2.233	2.009	1.433	1.571
Observations	8747	8747	8747	8747	8747
AIC	10034.89	10022.80	10007.69	9968.36	9947.19

Robust standard errors in parentheses
*p < .05, **p < .01, ***p < .001 (two-tailed test)

Table 6: Ordered Probit Regression of Loneliness by Relative Type and Other Socio-Demographic Attributes (Females: N=10,918)

	Model 1	Model 2	Model 3 Loneliness	Model 4	Model 5
Spouse	0.473*** (0.068)	0.499*** (0.068)		0.479*** (0.069)	0.440*** (0.070)
Father	0.083 (0.108)	0.117 (0.108)		0.083 (0.109)	0.067 (0.111)
Mother	0.281* (0.124)	0.272* (0.124)		0.292* (0.126)	0.255* (0.127)
Sibling	-0.085* (0.034)	0.102** (0.034)		0.108** (0.034)	0.086* (0.034)
Child	0.319*** (0.043)	0.255*** (0.045)		0.284*** (0.044)	0.210*** (0.047)
Number of Relatives			0.089*** (0.012)		
Household Members			-0.068*** (0.009)		-0.048*** (0.010)
Dependants in HH			-0.003 (0.042)		-0.013 (0.043)
Logged HH Income				-0.027* (0.012)	-0.020 (0.012)
Logged HH Consumption				-0.073** (0.017)	-0.048** (0.017)
Has Savings				-0.012 (0.038)	-0.021 (0.038)
< 7th Grade (omitted none)				-0.135*** (0.029)	-0.107*** (0.030)
≥ 7th Grade				-0.176*** (0.037)	-0.147*** (0.037)
Has Telephone				-0.057* (0.029)	-0.075** (0.029)
Migration Rate					0.365* (0.142)
20-24(omitted 15-19)		-0.013 (0.046)			-0.027 (0.046)
25-64		-0.042 (0.034)			-0.003 (0.035)
65-100		0.328*** (0.051)			0.194*** (0.054)
Cut Point 1	0.420	0.437	0.222	-0.239	-0.186
Cut Point 2	1.521	1.579	1.324	0.867	0.926
Cut Point 3	2.020	2.081	1.826	1.368	1.433
Observations	10918	10918	10918	10918	10918
AIC	19036.28	19014.44	19008.10	18952.57	18906.17

Robust standard errors in parentheses
*p < .05, **p < .01, ***p < .001 (two-tailed test)

Table 7: OLS Regression of Emotional Well-being by Relative Type, Household Decision-Making, and Other Socio-Demographic Attributes (Married Females: N=6,102)

	Model 1	Model 2	Model 3	Model 4
		Depressive Symptoms		
Spouse	0.411 (0.899)	0.686 (0.897)		0.317 (0.902)
Father	-0.295 (0.877)	-0.091 (0.877)		-0.005 (0.881)
Mother	1.737 (1.046)	1.644 (1.039)		1.176 (1.033)
Sibling	0.094 (0.258)	0.218 (0.258)		0.007 (0.269)
Child	2.296*** (0.367)	2.062*** (0.373)	0.620*** (1.082)	1.210** (0.395)
Household Members				0.120 (0.076)
Dependants in HH				-0.818* (0.330)
Logged HH Income				-0.203* (0.097)
Logged HH consumption				-0.078 (0.157)
Has Savings				-0.537 (0.303)
< 7th Grade (omitted none)				-0.712** (0.257)
≥ 7th Grade				-1.330*** (0.289)
Has Telephone				-0.880*** (0.227)
Migration Rate				5.157*** (1.118)
20-24(omitted 15-19)				-0.184 (0.601)
25-64				1.061* (0.535)
65-100				2.096** (0.669)
Decision Participation (4-6) (0-3 omitted)		-1.363** (0.487)	-1.515** (0.540)	-1.103* (0.485)
Decision Participation (7-9)		-1.617*** (0.471)	-1.825*** (0.519)	-1.107* (0.475)
Decision Participation (10-12)		-2.617*** (0.479)	-2.835*** (0.523)	-2.049*** (0.485)
Decision (4-6)*Child Migrant			1.068 (1.235)	
Decision (7-9)*Child Migrant			1.768 (1.239)	
Decision(10-12)*Child Migrant			2.153 (1.474)	
Constant	26.716*** (0.106)	28.467*** (0.452)	28.713*** (0.496)	28.421*** (1.162)
Observations	6102	6102	6102	6102
R-squared	0.01	0.02	0.02	0.03

Robust standard errors in parentheses
*p < .05, **p < .01, ***p < .001 (two-tailed test)

Table 8: Fixed Effects Model for Emotional Well-being Grouped by Household (N=17,979)

	All	*Males*	*Females*
	Depressive Symptoms		
Spouse	0.120 (0.601)	4.932* (1.979)	-0.046 (1.087)
Father	0.489 (0.540)	0.281 (1.274)	1.087 (1.014)
Mother	1.078 (0.731)	4.196* (2.030)	0.327 (1.433)
Sibling	-0.053 (0.188)	-0.569 (0.380)	0.194 (0.401)
Child	0.981** (0.303)	-0.040 (0.553)	1.134* (0.564)
> 7th Grade (omitted none)	-0.728*** (0.163)	-1.209*** (0.275)	-0.645* (0.305)
≤7th Grade	-0.957*** (0.190)	-1.322*** (0.337)	-1.055** (0.359)
Ages 20-24 (omitted 15-19)	0.135 (0.196)	0.194 (0.287)	0.002 (0.341)
Ages 25-64	1.112*** (0.144)	0.503* (0.211)	1.780*** (0.245)
Ages 65-100	2.841*** (0.270)	2.698*** (0.419)	3.884*** (0.494)
Sex	3.185*** (0.093)		
Constant	23.167*** (0.188)	24.019*** (0.283)	25.795*** (0.327)
Observations	17979	8263	9716
Number of HHs with 2 or more HH members	6360	5807	6267
R-squared	0.11	0.04	0.04

Robust standard errors in parentheses
*p < .05, **p < .01, ***p < .001 (two-tailed test)

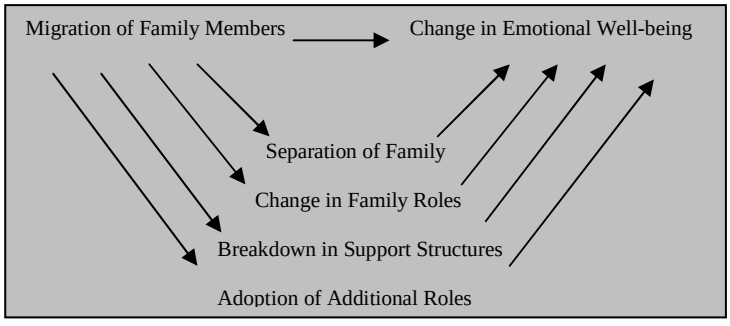

Figure 1: Analytic Model for the Effects of Migration On Family Members Remaining in the Country of Origin

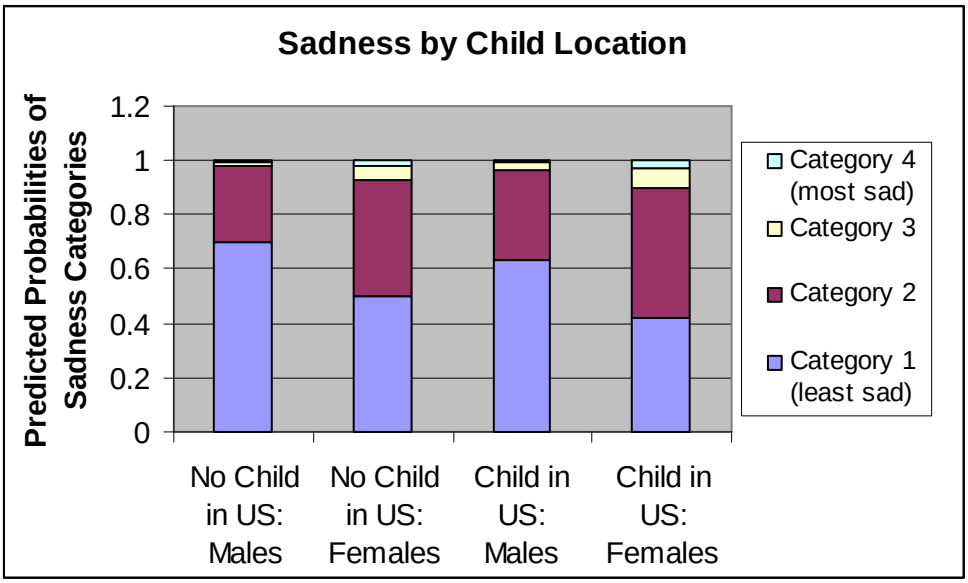

Figure 2: Predicted Probabilities of Sadness By Child's Location (N=19,665)

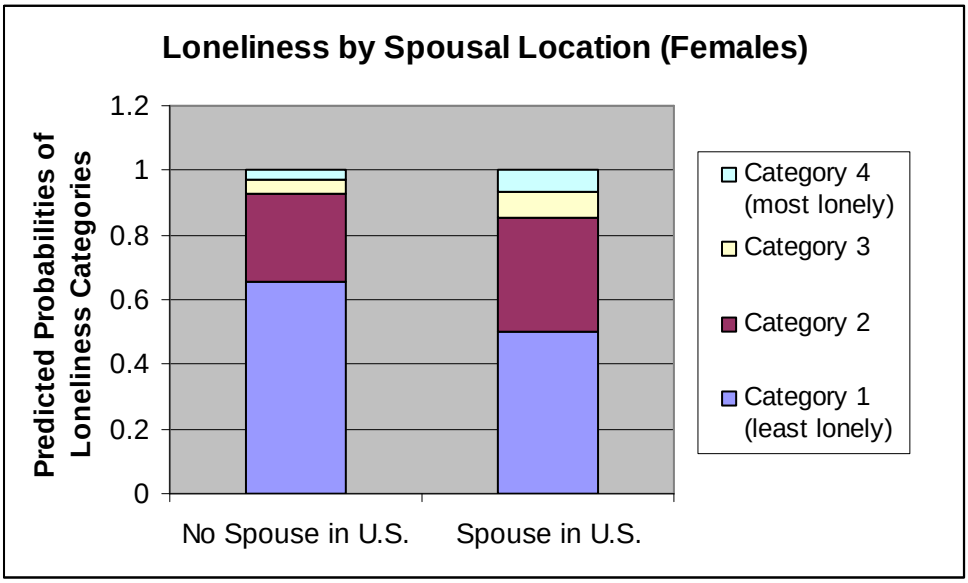

Figure 3: Predicted Probabilities of Loneliness by Spousal Location (Females, N=10,918)

Appendix:

Table A1: Emotional Well-being Scale

1. In the last 4 weeks, have you felt sad or anguished?
2. In the last 4 weeks, have you cried or felt like crying?
3. In the last 4 weeks, have you slept badly at night?
4. In the last 4 weeks, have you woken up spiritless (due to lack of energy or fear)?
5. In the last 4 week, have you had difficulties focusing on your daily activities?
6. In the last 4 weeks, has your appetite diminished?
7. In the last 4 weeks, have you felt obsessive or constantly repetitive (for example: with ideas that you cannot remove from your mind or with actions that you constantly repeat)?
8. In the last 4 weeks, has your sexual interest decreased? (omitted)
9. In the last 4 weeks, do you think you've been underperforming in your job or daily activities?
10. In the last 4 weeks, have you felt pressure in the chest?
11. In the last 4 weeks, have you felt nervous, sorrowful, anxious, or eager more than normal?
12. In the last 4 weeks, have you felt tired or discouraged more than normal?
13. In the last 4 weeks, have you felt pessimistic or have thought things will go wrong?
14. In the last 4 weeks, have you frequently had a headache?
15. In the last 4 weeks, have you felt more irritated or angry than normal?
16. In the last 4 weeks, have you felt insecure or lacking confidence in yourself?
17. In the last 4 weeks, have you felt useless to your family?
18. In the last 4 weeks, have you felt fear of something, as if you were waiting for something serious to happen?
19. In the last 4 weeks, have you wished to die?
20. In the last 4 weeks, have you lost interest in things?
21. In the last 4 weeks, have you felt lonely? (separate)

Table A2: Main Reason(s) for Potential Migration (N=3,341)

Reason for Potential Migration	Frequency	Percent
Related to Work / Improve Life	2,129	63.72
Education	413	12.36
Return to Place of birth	170	5.09
Partner's Health	51	1.53
Parents' / Parents In Law's Health	11	3.29
Someone Else's Health	11	3.29
To be Closer to Family	262	7.84
Insecurity Reasons	130	3.89
Political Reasons / Disturbances	7	2.10
Natural Disasters	14	0.42
Independence from Family	231	6.91
Marriage / Union	14	4.19
Better Housing	43	1.29
To know new places	54	1.62
Other	143	4.28

Table A3: Main reason for internal migration (N=9186)

Reason for Previous Internal Migration	Frequency	Percent
Related to Education/Training of Any Household Member	953	10.39
Going Back To Place of Origin	544	5.93
Related with the job of any household member / To improve standards of living	4,375	47.72
Marriage/union	1,347	14.69
Pregnancy	20	0.22
Death of Spouse/Partner	23	0.25
Somebody else's death	77	0.84
Your or your spouse's/partner's health reasons	99	1.08
Someone else's health reasons	133	1.45
To be close to family	677	7.38
For insecurity reasons	73	0.8
Political issues or disturbances	16	0.17
To be independent from family	109	1.19
Because you like the destination	213	2.32
Natural Disasters	32	0.35
Because you were deported	15	0.16
Other	462	5.04
Total	9,168	100

References

Aguilera-Guzman, R. M., M. S. C. Garcia, and F. J. Garcia. 2004. "Psychometric Characteristics of CES-D in a Sample of Mexican Rural Adolescents in Areas with a Strong Migratory Tradition." *Salud Mental* 27:57-66.

Alba, Richard D, D.S. Massey, and R.G. Rumbaut. 1999. "The Immigration Experience for Families and Children: Congressional Seminar." *Spivack Program in Applied Social Research and Social Policy, American Sociological Association.*

Alba, R.D. and V.Nee. 2003. *Remaking the American Mainstream: Assimilation and Contemporary Immigration*. Cambridge, Mass.: Harvard University Press.

Aroian, K. J. and A.E. Norris. 2003. "Depression Trajectories in Relatively Recent Immigrants." *Comprehensive Psychiatry* 44: 420-427.

Aroian, K.J., A.E. Norris, C.A. Patsdaughter, T.V. Tran. 1998. "Predicting Psychological Distress Among Former Soviet Immigrants." *International Journal of Social Psychology* 44: 284-294.

Artico, C.I. 2003. *Latino Families Broken by Immigration: The Adolescents' Perceptions.* New York: LFB Scholarly Publishing.

Bean, F. D., H.L. Browning, and W.P. Frisbie. 1984. "The Sociodemographic Characteristics of Mexican Immigrant Status Groups - Implications for Studying Undocumented Mexicans." *International Migration Review* 18:672-691.

Binford, L. 2003. "Migrant Remittances and (Under)development in Mexico." *Critique of Anthropology* 23: 305-336.

Blount B.W., G.I. Lubin, and A. Curry. 1992. "Family Separations in the Military." *Military Medicine* 157: 76-84.

Bureau of Consular Affairs, United States Department of State. 2005. Visa Bulletin 79: "Immigrant numbers for March 2005." Washington DC.

Calderon G.N (1997) "Un Cuestionario para Simplificar el Diagnóstico del Síndrome Depresivo" *Revista de Neuro-Psiquiatría* 60:127-135.

Castells, M. 1996. *The Rise of the Network Society*. Cambridge, Mass.: Blackwell Publishers.

———. 1997. *The Power of Identity*. Malden, MA: Blackwell.

Castles, S. 2002. "Migration and Community Formation under Conditions of Globalization." *International Migration Review* 36:1143-1168.

Chiquiar, D. and G.H. Hanson. 2005. "International Migration, Self-selection, and the Distribution of Wages: Evidence from Mexico and the United States." *Journal of Political Economy* 113:239-281.

Cohen, S. and T.A. Wills. 1985. "Stress, Social Support, and the Buffering Hypothesis." *Psychological Bulletin* 98:310-357.

Collins, P.H. 1991. *Black Feminist Thought: Knowledge, Consciousness, and the Politics of Empowerment*. New York: Routledge.

Curran, S.R., S. Shafer, K.M. Donato, F. Garip. 2005. "Mapping Gender and Migration in Sociological Scholarship: Is it Segregation or Integration?" Unpublished.

DeVos, S. 1995. *Household Composition in Latin America.* New York: Plenum Press.

Durand J., E.A. Parrado, and D.S. Massey. 1996. "Migradollars and Development: A Reconsideration of the Mexican Case." *International Migration Review*. 30:423-444.

Durand, J., W. Kandel, E.A. Parrado, and D.S. Massey. 1996. "International Migration and Development in Mexican Communities." *Demography* 33:249-264.

Durand, J., D.S. Massey, and R.M. Zenteno. 2001. "Mexican Immigration to the United States: Continuities and Changes." *Latin American Research Review* 36:107-127.

Ensel, W. 1986. "Measuring Depression: The CES-D Scale." Pp. 51-70 in *Social Support, Life Events and Depression.* N. Lin, A. Dean, and W. Ensel, eds. Orlando: Academic Press.

Eschbach K, J. Hagan, N. Rodriguez, R. Hanández-León, S. Bailey. 1999. "Death at the Border." *International Migration Review*. 33:430-454.

Espenshade, T.J. 1995. "Unauthorized Immigration to the United-States." *Annual Review of Sociology* 21:195-216.

Espin, O.M. 1987. "Psychological Impact of Migration on Latinas - Implications for Psychotherapeutic Practice." *Psychology of Women Quarterly* 11:489-503.

Espin, O.M. 1999. *Women Crossing Boundaries: A Psychology of Immigration and Transformations of Sexuality*. New York: Routledge.

Faist, T. 2000. "Transnationalization in International Migration: Implications for the Study of Citizenship and Culture." *Ethnic and Racial Studies* 23:189-222.

Farrell, M.P. and G.M. Barnes. 1993. "Family Systems and Social Support: A Test of Effects of Cohesions and Adaptability on the Functioning of Parents and Adolescents." *Journal of Marriage and the Family* 55: 119-132.

Feliciano, C. 2005. "Educational Selectivity in U.S. Immigration: How do Immigrants Compare to Those Left Behind?" *Demography* 42:131-152.

Fomby, P. 2005. *Mexican Migrants and their Parental Households in Mexico*. New York: LFB Scholarly Publishing.

Foner, N. 1997. "The Immigrant Family: Cultural Legacies and Cultural Changes." *International Migration Review* 31: 961-974.

Foner, N. 2005. *In a New Land: A Comparative View of Immigration*. New York: New York University Press.

Fouron, G. and N. Glick-Schiller. 2001. "All in the Family: Gender, Transnational Migration, and the Nation-State." *Identities-Global Studies in Culture and Power* 7:539-582.

Gill, H. 2006. *Going to Carolina del Norte: Narrating Mexican Migrant Experiences*. Chapel Hill: University Center for International Studies.

Glick-Schiller, N. 1999. "Transmigrants and Nation-States: Something Old and Something New in the U.S. Immigrant Experience." Pp. 94-119 in *The Handbook of International Migration*. Hirschman, C., P. Kasinitz and J. DeWind, eds., New York: Russell Sage Foundation.

Glick-Schiller, N. and G.E. Fouron. 1999. "Terrains of Blood and Nation: Haitian Transnational Social Fields." *Ethnic and Racial Studies* 22:340-366.

González de la Rocha, M. 1994. *The Resources of Poverty: Women and Survivial in a Mexican City.* Cambridge: Balckwell Publishers.

Gordon, M.M. 1964. *Assimilation in American life: The Role of Race, Religion, and National Origins*. New York: Oxford University Press.

Grasmuck S. and Pessar P.R. 1991. *Between Two Islands: Dominican International Migration.* Berkeley: University of California Press.

Guarnizo, L.E., A. Portes, and W. Haller. 2003. "Assimilation and Transnationalism: Determinants of Transnational Political Action among Contemporary Migrants." *American Journal of Sociology* 108:1211-1248.

Hagan, J. 1994. *Deciding to be Legal*. Philadelphia: Temple University Press.

Harker, K. 2001. "Immigrant Generation, Assimilation, and Adolescent Psychological Well-being." *Social Forces* 79:969-1004.

Hondagneu-Sotelo, P. 1992. "Overcoming Patriarchal Constraints - the Reconstruction of Gender Relations among Mexican Immigrant Women and Men." *Gender & Society* 6:393-415.

Hondagneu-Sotelo, P. and E. Avila. 1997. ""I'm here, but I'm there" - The Meanings of Latina Transnational Motherhood." *Gender & Society* 11:548-571.

Kanaiaupuni S.M. 2000. "Reframing the Migration Question: An Analysis of Men, Women, and Gender in Mexico." *Social Forces* 78:1311-1347.

Kandel, W. and D.S. Massey. 2002. "The Culture of Mexican Migration: A Theoretical and Empirical Analysis." *Social Forces* 80:981-1004.

Kyle, D. 2000. *Transnational Peasants: Migrations, Networks, and Ethnicity in Andean Ecuador*. Baltimore: Johns Hopkins University Press.

Lane, R. 2000. *The Loss of Happiness in Market Democracies.* New Haven: Yale University Press.

Latapi, A.E. 2004. "Employment Trends in Mexico: Reversing a 15 Year Loss?" Presented at *Migration and Terrorism: U.S. and European Perspectives:* University of California- Davis.

Lauby, J. and O. Stark. 1988. "Individual Migration as a Family Strategy – Young Women in the Philippines." *Population Studies-a Journal of Demography* 42:473-486.

LeVine S. 1993. *Dolor y Alegria: Women and Social Change in Urban Mexico.* Madison: University of Wisconsin Press.

Massey, D.S. 1990. "Social-structure, Household Strategies, and the Cumulative Causation of Migration." *Population Index* 56:3-26.

———. 1999. "Why does Immigration Occur?: A Theoretical Synthesis" Pp. 34-52 in *The Handbook of International Migration*. Hirschman, C., P. Kasinitz and J. DeWind, Eds. New York: Russell Sage Foundation.

Massey, D.S. and F.G. Espana. 1987. "The Social Process of International Migration." *Science* 237:733-738.

Massey, D.S., J. Arango, G. Hugo, A. Kouaouci, A. Pellegrino, and J.E. Taylor. 1993. "Theories of International Migration - a Review and Appraisal." *Population and Development Review* 19:431-466.

Massey, D.S., J. Durand, and N.J. Malone. 2002. *Beyond Smoke and Mirrors: Mexican Immigration in an Era of Economic Integration*. New York: Russell Sage Foundation.

Maza E. 1997. "La Cara Oculta de la Migracion." *Processo*. 1098: 40-52.

Midgley M. and J. Hughes. 1997. "Are Families Out of Date?" Pp. 55-68 in *Feminism and Families.* Nelson H.L. Ed. New York: Routledge.

Nicholson L. 1997. "The Myth of Traditional Family" Pp. 27-42 in *Feminism and Families.* Nelson H.L. Ed. New York: Routledge.

Palloni, A., D.S. Massey, M. Ceballos, K. Espinosa, and M. Spittel. 2001. "Social Capital and International Migration: A Test using Information on Family Networks." *American Journal of Sociology* 106:1262-1298.

Passel J.S. 2005 "Estimates of the Size and Characteristics of the Undocumented Population." *Pew Hispanic Center Report.* Washington D.C.: Pew Hispanic Center.

Paykel, E. 1973. "Life Events and Acute Depression." Pp. 215-236 in *Separation and Depression.* J. P. Scott and E. C. Senay eds. American Association for the Advancement of Science: Baltimore.

Peña M. 1991. "Class, Gender, Machismo: The 'treacherous-woman' Folklore of Mexican Male Workers." *Gender and Society.* 5:30-46.

Peñalosa F. 1968. "Mexican Family Roles." *Journal of Marriage and the Family*. 30:680-689.

Portes, A. 1997. "Immigration Theory for a New Century: Some Problems and Opportunities." *International Migration Review* 31:799-825.

———. 2003. "Conclusion: Theoretical Convergences and Empirical Evidence in the Study of Immigrant Transnationalism." *International Migration Review* 37:874-892.

Portes, A., L.E. Guarnizo, and P. Landolt. 1999. "The Study of Transnationalism: Pitfalls and Promise of an Emergent Research Field." *Ethnic and Racial Studies* 22:217-237.

Portes, A. and R.G. Rumbaut. 2001. *Legacies: the Story of the Immigrant Second Generation*. Berkeley. New York: University of California Press; Russell Sage Foundation.

Pries, L. 2001. "The Disruption of Social and Geographic Space - Mexican-U.S. Migration and the Emergence of Transnational Social Spaces." *International Sociology* 16:55-74.

———. 2004. "Determining the Causes and Durability of Transnational Labour Migration between Mexico and the United States: Some Empirical Findings." *International Migration* 42:3-39.

Radloff, L.S. 1977. "The CES-D Scale: A Self-Report Depression Scale for Research in the General Population." *Applied Psychological Measurement* 1: 385-401.

Rodriguez, N. J. Hagan, A. Ugalde and N. Glenn. 2000. "Family Separation, Coping, Social Support, and Mental Health Among Immigrants from Mexico and Central America." Research Paper for the Hogg Foundation for Mental Health.

Rubalcava, L. and G. Teruel. 2004. "The Mexican Family Life Survey Project (MxFLS): Study Design and Baseline Results". Documento de trabajo CIDE & UIA.

Schmalzbauer, L. 2004. "Searching for Wages and Mothering from Afar: The Case of Honduran Transnational Families." *Journal of Marriage and the Family* 66:1317-1331.

Selby, H. A. Murphy, and S.A. Lorenzen. 1990. *The Mexican Urban Household: Organizing for Self-Defense.* Austin: University of Texas Press.

Shutika, D. 2005. "Bridging the Community: Nativism, Activism and the Politics of Inclusion in A Mexican Settlement in Pennsylvania." Pp. 103-132 in *New Destinations: Mexican Immigration in the United States.* V. Zuniga and R. Hernadez-Leon eds. New York: Russell Sage Foundation.

Sigmon, S.T., J.J. Pells, N.E. Boulard, S. Whitcomb-Smith, T.M. Edenfield, B.A. Hermann, S.M. LaMattina, J.G. Schartel, E. Kubik. 2005. "Gender Differences in Self-Reports of Depression: The Response Bias Hypothesis Revisited." *Sex Roles* 53: 401-411.

Singer, A. and D.S. Massey. 1998. "The Social Process of Undocumented Border Crossing Among Mexican Migrants." *International Migration Review* 32:561-592.

Smith, R.C. 2005. *The Mexican New York: Transnational Lives of New Immigrants.* Berkeley: University of California Press.

Stark, O. and R.E.B. Lucas. 1988. "Migration, Remittances, and the Family." *Economic Development and Cultural Change* 36:465-481.

Stark, O. and J.E. Taylor. 1989. "Relative Deprivation and International Migration." *Demography* 26:1-14.

———. 1991. "Migration Incentives, Migration Types - the Role of Relative Deprivation." *Economic Journal* 101:1163-1178.

Suarez-Orozco, C., and D.B. Qin. 2006. "Gendered Perspectives in Psychology: Immigrant Origin Youth." *International Migration Review* 40: 165-198.

Suarez-Orozco, C., I.L.G. Todorova, and J. Louie. 2002. "Making up for Lost Time: The Experience of Separation and Reunification Among Immigrant Families." *Family Process* 41:625-643.

Taylor, J.E. 1999. "The New Economics of Labour Migration and the Role of Remittances in the Migration Process." *International Migration* 37:63-88.

Thapa, S.B. and E. Hauff. 2005. "Gender Differences in Factors Associated with Psychological Distress among Immigrants from Low- and Middle-Income Countries - Findings from the Oslo Health Study." *Social Psychiatry and Psychiatric Epidemiology* 40:78-84.

Thoits, P.A. 1995. "Stress, Coping, and Social Support Processes - Where Are We - What Next." *Journal of Health and Social Behavior*: 53-79.

Todaro, M.P. and L. Maruszko. 1987. "Illegal Migration and United-States Immigration Reform - a Conceptual-Framework." *Population and Development Review* 13:101-114.

Vega, W.A., B. Kolody, and J.R. Valle. 1987. "Migration and Mental-Health - an Empirical Test of Depression Risk-Factors among Immigrant Mexican Women." *International Migration Review* 21:512-530.

Vertovec, S. 1999. "Conceiving and Researching Transnationalism." *Ethnic and Racial Studies* 22:447-462.

———. 2004. "Migrant Transnationalism and Modes of Transformation." *International Migration Review* 38:970-1001.

Vredenburg, K., L. Krames, G.L. Flett. 1986. "Sex Differences in the Clinical Expression of Depression." *Sex Roles* 14: 37-49.

Weintraub, S., F. Alba, R. Fernandez de Castro, and M.G. Griego. 1997. "Responses to Migration Issues." Team Report to Mexico/United States Binational Study on Migration.

Zvonkovic, A.M, C.R Solomon, A.M. Humble, M. Manoogian. 2005. "Family Work and Relationships: Lessons from Families of Men whose Jobs Require Travel." *Family Relations* 54: 411-422.