

Family Members' Transnational Migration, Community Contexts, and Psychological Distress in Mexican Families

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ABSTRACT. This study examines the influence of having family members in the U.S. on Mexican family members' psychological distress, taking family and community contexts into consideration. Using multilevel modeling analyses of the first wave of the Mexican Family Life Survey (MxFLS-1), we examined psychological distress of Mexican adolescents and married adults regarding the influence of having family members in the U.S. Although having children in the U.S. increased psychological distress for married adults, having spouses in the U.S. did not show significant association with psychological distress. For Mexican adolescents, having parents or siblings in the U.S. did not affect psychological distress significantly. Living in communities with high prevalence of transnational migration was associated with increased psychological distress for married adults and for adolescents. For married adults, multilevel modeling revealed that effects of having spouses and children in the U.S. varied across communities. The same was true for Mexican adolescents who have siblings in the U.S.

Keywords: ecological model, Mexican families, multilevel modeling, psychological distress, transnational family

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Current United States immigration policy makes it difficult for members of families to migrate together (Dreby, 2014; Mazzucato & Schans, 2011). This results in a transnational family configuration in which family members “live some or most of the time separated from each other, yet hold together and create something that can be seen as a feeling of collective welfare and unity, namely ‘familyhood,’ even across national borders” (Bryceson & Vuorela, 2002, p. 3). *Transnational* is an apt descriptor for the approximately 500,000 Mexicans who migrate to the U.S. annually (Passel & Cohn, 2009). Many of these immigrants remit financial resources to family members who remain in Mexico. Although migrating family members experience stress due to acculturation transitions in their new environments, remaining family members may also experience considerable distress resulting from absence of family members (Graham & Jordan, 2011; Lahaie, Hayes, Piper, & Heymann, 2009; Solheim, Zaid, & Ballard, 2015). This study examines factors that contribute to Mexican family members’ psychological distress, especially effects of having family members who migrate to work in the U.S.

Despite prevalence of research on U.S.-Mexican transnational families, there are no in-depth investigations of non-economic factors affecting family members remaining within their community contexts. People make migration decisions in the contexts of family and community (Cohen, 2001; Conway & Cohen, 2003). Migration to the U.S. is more common in some Mexican communities than in others (Kandel & Massey, 2002; Heymann et al., 2009), which could influence psychological distress among family members remaining in Mexico. Moreover, the perception of community safety related to crime, drug use, and violence may increase anxiety and fear (Braakmann, 2013; Latkin & Curry, 2003). These factors may also affect psychological distress of community members without migrant family members because the community contexts in which they live influence them. Therefore, we hypothesize an association between community context and psychological distress in Mexican families. Using multilevel modeling and taking family and community context into consideration, we investigate the impact of having family members in the U.S. on psychological distress in Mexican families. We explore whether this psychological impact is different for adults and adolescents, hypothesizing that consequences will differ with one’s life stage.

Literature Review

Viewed through an ecological lens, human development is a joint function of personal characteristics, contextual characteristics, and social continuities and changes occurring over the life course (Bronfenbrenner & Morris, 2006). Life experiences of individuals living in transnational Mexico-U.S. families are influenced by interdependent factors such as personal and familial characteristics and community and cultural contexts (Zentgraf & Chinchilla, 2012). Family members who remain in Mexico may be vulnerable to stresses of transnational separation from migrants (Falicov, 2007; Silver, 2014; Suarez-Orozco, Bang, & Kim, 2011) and should be

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understood with respect to family and community contexts. This study focuses on those contexts to examine factors affecting psychological distress in Mexican families.

Family Context

Transnational migration of a close family member affects all members of a family system and may result in psychological distress (Silver, 2014). For children, psychological distress may lead to behavioral problems and difficulties in school (Castaneda & Buck, 2011; Dreby, 2007; Lahaie et al., 2009; Suarez-Orzoco et al., 2011), especially when the migrating family member is a care-giving parent (Heymann et al., 2009; Lahaie et al., 2009). However, a wide supportive kin network in Mexican families may offset absence of parents when multiple caregivers fulfill parental roles for remaining children (Zentgraf & Chinchilla, 2012). Others, particularly extended family members such as grandparents, aunts, or uncles, become primary caregivers who take on parental roles and functions. They provide physical support and form strong emotional bonds with children in the migrating parent's absence (Castaneda & Buck, 2011; Suarez-Orzoco et al., 2011). Sibling caretaking is also a common practice in Mexican families; older siblings assume responsibility for care of their younger siblings as substitute parents (Castaneda & Buck, 2011; Hafford, 2010). Studies have found that with the passage of time, children who remain in their home countries adjust to and cope with family separation (Schmalzbauer, 2008) and begin to understand and appreciate their parents' sacrifice (Castaneda & Buck, 2011; Dreby, 2014).

In addition to its impact on children, migration affects spousal relations. Due to a gendered pattern in which men typically migrate from Mexico to the U.S., research has focused on wives who remain in Mexico (Boehm, 2008; Radel & Schmook, 2009). Many studies show that changes in family roles and living arrangements combine with feelings of loss to increase psychological distress for remaining spouses (Boehm, 2008; Martone, Muñoz, Lahey, Yoder, & Gurewitz, 2011; Radel & Schmook, 2009; Solheim et al., 2015). One source of this stress is increased responsibility and labor demands for women (Boehm, 2008; Radel & Schmook, 2009), but Nobles et al. (2014) found that stress is associated mainly with absence of spouses rather than influenced indirectly by decreased household resources or increased caregiving burdens. A wife may experience additional stress due to loss of autonomy when her husband's absence requires that she move in with in-laws (Arias, 2013; Martone et al., 2011; Nobles et al., 2014). Tensions due to power struggles over money access and control may arise if husbands remit to mothers instead of wives (Martone et al., 2011).

Men and women who send children to the U.S. may experience psychological distress (Silver, 2014), but both genders tend to report better levels of living and fewer concerns for the future (González-Vázquez, Salgado de Snyder, & Kageyama Escobar, 2011, as cited in Arias, 2013). Finally, siblings of migrants, specifically women, experience psychological distress (Silver, 2014). However, Silver's study did not consider different relationships with siblings across life stages (Whiteman, McHale, & Soli, 2011). Therefore, it is unknown whether migrant siblings' absence affects adolescents' psychological distress.

Community Context

Decisions to migrate to the U.S. are made within sending community contexts (Cohen, 2001; Conway & Cohen, 2003). Transnational migration is more prevalent in some communities

in Mexico than in others; in some areas, community members are expected to migrate to the U.S. to send remittances (de Snyder, Diaz-Perez, Acevedo, & Natera, 1996; Taylor, Moran-Taylor, & Ruiz, 2006; Wilkerson, Yamawaki, & Downs, 2009). Sending communities rely on remittances to sustain their economy and reinforce the expectation of contributing to the economic well-being of family and community through transnational migration (Castaneda & Buck, 2011; Martone et al., 2011; Zentgraf & Chinchilla, 2012). Simultaneously, these communities can provide important support to transnational families because they are especially knowledgeable about and experienced with transnational migration (Massey, Goldring, & Durand, 1994). However, previous studies have found that members of high-migrant communities are likely to be more distressed than are members of communities with less migration (Aguilar-Morales, Vargas-Mendoza, Romero-García, & García-Cortes, 2008, as cited in Nobles et al., 2014; Silver, 2014).

A “culture of migration” (Kandel & Massey, 2002, p. 981) has emerged and is transmitted across generations that experience high rates of transnational migration. Children of migrant parents are more likely to become migrants themselves. Older siblings who have replaced migrating parents as caregivers for younger siblings may also migrate to the U.S. Likewise, youths in communities with high prevalence of transnational migration tend to be motivated to seek opportunities in the U.S. and are less interested in their achievements in Mexico (Kandel & Massey, 2002). As a result, they might not be satisfied by their current situations in Mexico and may experience stress.

Another community characteristic that may contribute to remaining family members’ stress is concern over safety (Portes & Rumbaut, 1990). For example, residents in some Mexican communities worry about crime, drug-use, and vandalism (Latkin & Curry, 2003; Solheim, Rojas-Garcia, Olson, & Zuiker, 2012). Perceptions that their communities are not safe have stronger influences on community members’ psychological distress compared to whether or not objective measures indicate that communities should be considered safe (Latkin & Curry, 2003).

Statement of the Problem

Research on transnational immigrant workers’ psychological distress is present in the literature (e.g., Alderete, Vega, Kolody, & Aguilar-Gaxiola, 2000; Grzywacz et al., 2006), but studies of the psychological stress of family members who remain in their home countries are rare (Heymann et al., 2009; Nobles et al., 2014; Silver, 2014). Of the few studies the authors found, most focused either on children of transnational migrant parents (e.g., Donato & Duncan, 2011; Graham & Jordan, 2011) or on wives of transnational migrant husbands (e.g., Menjivar & Agadjanian, 2007; Radel & Schmook, 2009). Although reactions to parents’ migration differs with children’s developmental stages (Dreby, 2007), few studies have a specific focus on impacts of transnational migration on adolescents. Since relational dynamics between children and parents and

between siblings change significantly during adolescence (Cicirelli, 1994; Dreby, 2007; Whiteman et al., 2011), examining psychological distress of adolescents pertaining to family members' transnational migration is required. Additionally, there is little consideration of how community characteristics affect remaining family members' psychological responses to migration. The current study addressed these gaps in the literature and compared psychological distress in adolescents and married adults, assuming there would be different psychological effects when family members migrate transnationally. Using multilevel modeling analyses, we examined psychological distress while considering family and community contexts.

Methods

Data

This study used data from the first wave of the Mexican Family Life Survey (MxFLS-1). The MxFLS-1 represents Mexico at national, urban-rural, and regional levels. It includes information on economy, demographics, epidemiology, and population migration. Using a probabilistic multi-stage cluster design of 8,440 households in 150 communities throughout Mexico, sampling unit selection was based on criteria of national, urban-rural, and regional representation on pre-established demographic and economic variables. The survey oversampled rural communities with fewer than 2,500 inhabitants (see Rubalcava & Teruel, 2006 for detailed information).

Data for household and individual information were collected through interviews with household members age 15 and over, and from community leaders for community information. One or two adults in each household provided socioeconomic and demographic information for the households. Individual level information was gathered directly from household members. Community characteristics were drawn from surveys interviewing municipal presidents, health centers, schools, and commercial establishments to collect qualitative and quantitative data on a community (Rubalcava & Teruel, 2006). The sample for the current study included 10,389 married adults over age 18 from 5,433 households and 2,866 unmarried adolescents between the ages of 15 and 18 from 2,095 households in 150 Mexican communities. Adolescents under age 15 were not included because data for these household members was collected via proxy interviews with parents (Silver, 2014).

Dependent Variable

Psychological distress. The dependent variable *psychological distress* included responses to 20 items about mental health (e.g., "In the last 4 weeks, have you felt sad or anguished?") developed by the National Psychiatric Institute in Mexico. The items are based on the Center for Epidemiologic Studies Depression (CES-D) scale (Michaelsen, 2012), which is relevant for adults and adolescents (Chabrol, Montovany, Chouicha, &

Duconge, 2002; Radloff, 1991). Responses ranging from 0 (no problem) to 3 (problem all the time) were summed. Cronbach's alpha coefficient was .84 for adolescents and .88 for married adults. The possible range for psychological distress was 0 to 60. Mean psychological distress scores for married adults and for adolescents were 6.33 (SD = 6.17) and 7.45 (SD = 7.37) respectively.

Independent Variables

Individual-level variables. Ages and genders of respondents were included as individual-level variables. The mean age of married adults was 43.46 (SD = 14.55) and 16.47 (SD = 1.12) for adolescents. About 55% of the married adults and about one-half of the adolescents were female. Whether respondents had family members in the U.S. was also considered as individual-level characteristic. Married adults were asked whether they had a migrated spouse or migrated children; adolescents were asked whether parents or siblings were in the U.S. (0 = no; 1 = yes). About 2% of married adults (n = 216) had spouses and about 11% (n = 1,085) had children in the U.S. Approximately 5% of adolescents (n = 136) had parents and 15% (n = 415) had siblings in the U.S.

Family-level variables. Household size and annual household income were included as family-level variables. Household size was estimated by the total numbers of persons living in the households. The mean household size for married adults was 4.66 (SD = 1.95); for adolescents, the mean household size was 5.55 (SD = 2.04). Annual household income was calculated by summing the annual incomes of all household members in Mexico. The mean household income for married adults and for adolescents was 2,437,841 pesos (SD = 70,500,000) and 1,952,676 pesos (SD = 53,500,000) respectively. Log of household income was used for analysis.

Community-level variables. Community migration factor and community safety were included as community-level variables. Using a community identifier and individual sampling weights, the investigators estimated *community migration factor*, the percentage of respondents in a particular community who had a family member in the U.S. A 0-9 interval scale based on percentages was created (0 = 0%-9.9% to 9 = 90.0%-99.9%). The mean community migration factor was 0.71 (SD = 1.17); on average, about 7% of members of a community had a family member in the U.S. Municipal presidents or delegates were asked whether their communities had problems in six areas: vandalism, drinking, street drugs, prostitution, police patrols, and paramilitary groups. Objective statistics on these safety issues could not be obtained from another database because geographic information on communities was excluded from MxFLS data to ensure confidentiality. Except for police patrols, responses were reverse-coded (0 = yes, 1 = no) and summed. Higher scores indicated safer community environments (range: 0 to 6). The community safety scale had a Cronbach's alpha of .61 (Note: This relatively low

reliability might be due to varying levels of severity associated with safety issues included). The mean for community safety was 2.83 (SD = 1.31).

Data Analyses

The investigators performed multilevel modeling (hierarchical linear modeling) using individual-, family-, and community-level variables to examine the effect of having family members in the U.S. on psychological distress. Individual-level variables included age, gender, and having a family member in the U.S. Family-level variables included household size and log of household income. Community-level variables included community migration factor and community safety. Individuals were treated as clustered within families and families were nested in communities.

For married adults, Model 1 tested influences of individual and family characteristics on psychological distress. The equation for Model 1 is:

$$Y_{ijk} = \beta_1 + \beta_2(\text{age}) + \beta_3(\text{female}) + \beta_4(\text{spouse in the U.S.}) + \beta_5(\text{children in the U.S.}) + \beta_6(\text{household size}) + \beta_7(\text{log of household income}) + \zeta_{jk}^{(2)} + \zeta_k^{(3)} + \varepsilon_{ijk}$$

It is assumed that the community-level random intercept $\zeta_k^{(3)}$ has zero mean and variance $\psi^{(3)}$, given all observed covariates in community k , X_k ; that the family-level random intercept $\zeta_{jk}^{(2)}$ has zero mean and variance $\psi^{(2)}$, given $\zeta_k^{(3)}$ and X_k ; and the individual-level error term ε_{ijk} has zero mean and variance θ , given $\zeta_k^{(3)}$, $\zeta_{jk}^{(2)}$, and X_k .

Model 2 estimated influences of individual, family, and the community characteristics. The equation for Model 2 is:

$$Y_{ijk} = \beta_1 + \beta_2(\text{age}) + \beta_3(\text{female}) + \beta_4(\text{spouse in the U.S.}) + \beta_5(\text{children in the U.S.}) + \beta_6(\text{household size}) + \beta_7(\text{log of household income}) + \beta_8(\text{community migration factor}) + \beta_9(\text{community safety}) + \zeta_{jk}^{(2)} + \zeta_k^{(3)} + \varepsilon_{ijk}$$

Model 3 allows regression slopes of spouse and children in the U.S. to vary across communities. Thus, coefficients of spouse (β_4) and children in the U.S. (β_5) in Model 3 indicate their average effects across the communities. The equation for Model 3 is:

$$Y_{ijk} = \beta_1 + \beta_2(\text{age}) + \beta_3(\text{female}) + \beta_4(\text{spouse in the U.S.}) + \beta_5(\text{children in the U.S.}) + \beta_6(\text{household size}) + \beta_7(\text{log of household income}) + \beta_8(\text{community migration factor}) + \beta_9(\text{community safety}) + \zeta_{jk}^{(2)} + \zeta_{1k}^{(3)} + \zeta_{2k}^{(3)}(\text{spouse in the U.S.}) + \zeta_{3k}^{(3)}(\text{children in the U.S.}) + \varepsilon_{ijk}$$

in which $\zeta_{jk}^{(2)}$ and $\zeta_{1k}^{(3)}$ are family- and community-level random intercepts. The $\zeta_{2k}^{(3)}$ and $\zeta_{3k}^{(3)}$ are community-specific disturbances with regard of having a spouse or children in the U.S.

Models 4 to 6 for adolescents have the same equations as above except that β_4 and β_5 represent the slopes of parents and siblings in the U.S., respectively. Stata 13.1 was used for analyses.

Results

The investigators tested an unconditional model (null model) that produced statistically significant between-family and between-community variances of psychological distress, indicating that individuals from different families and communities experienced varying levels of psychological distress (not shown). Next, Model 1 for married adults and Model 4 for adolescents tested effects of individual- and family-level variables on psychological distress. Then, Model 2 for married adults and Model 5 for adolescents added community-level variables, community migration factor, and community safety. Finally, Model 3 for married adults and Model 6 for adolescents allowed random coefficients of having an absent family member. This full model assumes that having an absent family member has effects on psychological distress that may vary across communities.

Married Adults

Model 1 resulted in significant slopes for having spouses and children in the U.S. (See Table 1, p 111). This means that having spouses and/or children in the U.S. significantly increased remaining married adults' psychological distress. With other variables held constant, having a migrant spouse in the U.S. was not significantly associated with psychological distress. By contrast, if married adults had children in the U.S. they were likely to have about 0.86 point greater psychological distress compared to their community counterparts, when holding other variables constant ($p < .001$). The association remained significant after controlling for community migration factor and community safety (Model 2) and random coefficients of having a spouse and children in the U.S. (Model 3), even though coefficients decreased slightly ($\beta = 0.77$ and 0.75 , respectively).

The community migration factor was associated with increases in psychological distress (Model 2). This means that the more a community had instances of transnational migration, the more likely it was for married adults in that community to be distressed. Every 10% increase in the community migration factor was associated with a 0.26 point increase in psychological distress level ($p < .05$). Community safety did not have a significant influence on psychological distress.

Based on the full model result (Model 3) that allowed random coefficients of having a spouse and children in the U.S., the effect of having a spouse in the U.S. on psychological distress varied across communities: 95% communities had slopes between -0.65 and 3.25. This means that having a spouse in the U.S. was more stressful for married adults in some communities compared with those living in other communities. By contrast, the effect of having children in the U.S. on psychological distress varied less across communities compared to that of having spouses in the U.S.: 95% of communities had slopes between -0.34 and 1.31. The level of psychological distress varied across

communities and families nested in the communities. It was estimated that 95% of the communities and of the families had random intercepts in the ranges of -3.25 to 5.06, and -8.05 to 13.77, respectively.

Other statistically significant variables reported in Table 1 (Model 3) included age ($\beta = 0.09$, $p < .001$), being female ($\beta = 4.00$, $p < .001$), household size ($\beta = 0.09$, $p < .05$), and log of household income ($\beta = -.05$, $p < .01$). On the one hand, being older, female, and living with more household members increased levels of psychological distress. On the other hand, household income was associated with decreases in psychological distress.

Adolescents

For adolescents, having parents and siblings in the U.S. was not significantly associated with psychological distress (See Model 4 in Table 2, p. 112). Although having siblings in the U.S. had a significant effect on adolescents' psychological distress in an initial regression model when community context was *not* considered, the association did not remain significant when multilevel modeling was utilized. This underscores the importance of using an ecological lens that considers individuals and families in the contexts of their communities.

A community's migration factor was associated with an increase in psychological distress (Model 5). For every 10% increase in prevalence of community migration there was a 0.35 point increase in psychological distress ($p < .05$). This means that higher prevalence of transnational migrations in a community was associated with higher levels of distress in adolescents in that community. The association remained significant after adding random coefficients of having parents and siblings in the U.S. to Model 6, although the coefficient decreased slightly ($\beta = 0.32$). Community safety did not have significant influence on adolescents' psychological distress.

The full model (Model 6), which allowed random coefficients of having parents and siblings in the U.S., revealed that influence of having siblings in the U.S. on psychological distress varied across communities: 95% of communities had slopes between -0.84 and 1.22. This means that having siblings in the U.S. increased psychological distress for adolescents in some communities more than in others. By contrast, the influence of having parents in the U.S. did not vary across communities. Levels of psychological distress varied across communities: an estimated 95% of communities had random intercepts in the range of -0.91 to 1.35. Random intercepts at family-level ranged from -7.65 to 27.22.

Gender was another statistically significant factor reported in Table 2 (Model 6) ($\beta = 3.01$, $p < .001$): female adolescents were more psychologically distressed than were male adolescents. There was no age effect on adolescents' psychological distress. Household

size and income did not have significant influence on psychological distress, which differed from the income effect on married adults' distress. There were no significant interaction effects among within- and between-level variables for married adults and adolescents.

Discussion

This study examined the impact of having migrating family members in the U.S. on psychological distress in Mexican families. Results suggest different impacts for married adults and adolescents. Having children in the U.S. increased married adults' psychological distress, but having a spouse in the U.S. did not have a significant influence on psychological distress. For adolescents, having parents or siblings in the U.S. was not significantly associated with their level of distress.

There were also differences in the roles community contexts played in how migrating family members influenced married adults' and adolescents' distress. For married adults, community context mattered in their experiences of psychological distress when they had spouses or children in the U.S. For adolescents, distress associated with having siblings in the U.S. varied by community but not when parents had migrated. These results imply that community contexts make a difference in perceptions of having a migrating family member; it may be considered problematic in some communities or perceived as normal in other communities. Communities also had varied mean levels of psychological distress for married adults and adolescents, which means that members of some communities were generally more psychologically distressed than were members of other communities. Perhaps higher levels of migration reflect higher levels of economic distress and fewer opportunities for families to secure resources to meet their needs.

Consistent with previous research (Aguilar-Morales et al., 2008, as cited in Nobles et al., 2014; Silver, 2014), results from the current study found that individuals in high prevalence migrant communities experienced greater levels of psychological distress. For adolescents, the community migration factor was more influential in explaining their psychological distress than was having migrant parents or siblings. This finding presents a challenge to interpretation. Perhaps a culture of migration in their communities (Kandel & Massey, 2002) overtly or covertly pressures adolescents to seek opportunities through migration to the U.S. Adolescents who remain in Mexico in these communities may be distressed because they want to migrate but have not or could not. Another plausible explanation is that these adolescents are pressured to fill multiple roles that absent adults/parents in the family or young adults in the community vacated. Research has noted that care of younger siblings can fall to older siblings when parents migrate (Castaneda & Buck, 2011; Hafford, 2010). Even though considered culturally normative (Falicov, 2007), the additional responsibility can take a psychological toll. Although the current study did not consider school contexts, perception of migration in

school contexts or among peer groups could be influential. For example, if peers or teachers think that having a migrating parent is problematic, adolescents with migrant parents experience difficulties in coping with the absence, and in their peer relationships and school performances (Dreby, 2007).

We also found that living with additional household members increased psychological distress of married adults but had no effect on psychological distress of adolescents. Shifting and/or ambiguous roles in family caregiving may increase stress for adults, especially for women (Menjivar & Agadjanian, 2007; Rodriguez, 2010, as cited in Martone et al., 2011). Although household size and income were the only family-level variables, family context was accounted for family members' psychological distress by clustering of family members. For example, including a random intercept at family level revealed that members of some families were more psychologically distressed than were those in other families. This could be the result of a variety of family characteristics beyond household size and income.

Limitations, Implications, and Conclusion

The current study is cross-sectional, which is a limitation. For example, the investigators found that having parents or siblings in the U.S. did not affect adolescents' psychological distress significantly. However, it is still unknown whether the effect changed during the transition from childhood to adolescence and from adolescence to adulthood. Future research needs to explore influences of frequency and duration of transnational migration on psychological distress of family members who remain behind and whether there is change in psychological distress over time. Studies should also consider if remittances families receive moderate the impact of these factors on psychological distress on adults and children in various community settings.

As the prevalence of transnational family systems increases, family scholars must consider complex influences of migration on families when conducting research, influencing policy, and designing and delivering educational or therapeutic intervention or prevention programs. These complexities stem from (a) having family members in two or more countries; (b) dealing with disruptions, changes, and conflicts related to family roles, resources, and relationships; (c) navigating communities in multiple locations that affect individual and family well-being; and (d) coping with stress from various sources. This study highlights some of this complexity and provides scholars with deeper understanding of these families.

This study employed multilevel modeling analyses that provided an ecological lens through which to examine multiple influences at individual, family, and community levels (Bronfenbrenner & Morris, 2006; Falicov, 2007). The current study contributes to literature on transnational families by providing evidence of the impacts of family and

community contexts on psychological distress among family members who remain in Mexico when others in their family migrate from Mexico to the U.S.

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Table 1

Multilevel Analyses of Psychological Distress for Married Adults (n = 10,389)

Variables	Model 1	Model 2	Model 3
<i>Individual-level variables</i>			
Age	0.09 (.01)***	0.09 (.01)***	0.09 (.01)***
Female	4.00 (.12)***	4.00 (.12)***	4.00 (.12)***
Spouse in the U.S. ^a	0.91 (.48)	0.81 (.49)	0.77 (.54)
Children in the U.S. ^b	0.86 (.27)***	0.77 (.27)**	0.75 (.28)**
<i>Family-level variables</i>			
Household size	0.10 (.02)*	0.09 (.04)*	0.09 (.04)*
Log of household income	-0.06 (.02)**	-0.05 (.02)**	-0.05 (.02)**
<i>Community-level variables</i>			
Community migration factor	-	0.26 (.13)*	0.26 (.13)*
Community safety	-	0.13 (.12)	0.13 (.12)
Intercept	1.09 (.42)**	0.54 (.53)	0.53 (.53)
<i>Variance components</i>			
Between-family intercept	11.66	11.66	11.62
Between communities			
Intercept	2.59	2.48	2.46
Spouse in the U.S.	-	-	3.06
Children in the U.S.	-	-	0.48
Residuals	33.97	33.96	33.91

Note. ^a Spouse in the U.S.: 0 = no, 1 = yes. ^b Children in the U.S.: 0 = no, 1 = yes.

*** $p < .001$. ** $p < .01$. * $p < .05$.

Table 2

Multilevel Analyses of Psychological Distress for Adolescents (n = 2,866)

Variables	Model 4	Model 5	Model 6
<i>Individual-level variables</i>			
Age	-0.07 (.09)	-0.06 (.09)	-0.06 (.09)
Female	3.00 (.21)***	3.01 (.21)***	3.01 (.21)***
Parents in the U.S. ^a	0.47 (.61)	0.25 (.62)	0.27 (.62)
Siblings in the U.S. ^b	0.47 (.38)	0.14 (.40)	0.21 (.43)
<i>Family-level variables</i>			
Household size	-0.08 (.06)	-0.09 (.06)	-0.09 (.06)
Log of household income	-0.03 (.03)	-0.02 (.03)	-0.03 (.03)
<i>Community-level variables</i>			
Community migration factor	-	0.35 (.14)*	0.32 (.14)*
Community safety	-	-0.03 (.11)	-0.03 (.11)
Intercept	6.44 (1.57)***	6.24 (1.61)***	6.26 (1.61)***
<i>Variance components</i>			
Between-family intercept	17.79	17.81	17.66
Between communities			
Intercept	1.04	0.92	0.86
Parents in the U.S.	-	-	0.00
Siblings in the U.S.	-	-	1.29
Residuals	16.90	16.87	16.90

Note. ^a Parents in the U.S.: 0 = no, 1 = yes. ^b Siblings in the U.S.: 0 = no, 1 = yes.

*** p < .001. ** p < .01. * p < .05.