

The Effects of Family Separation on Latina Young Adult Mental Health

by

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## ABSTRACT

The Latinx population in the United States is projected to increase exponentially in upcoming years. Latina women in particular are put at disproportionate risk of experiencing psychological distress after immigrating to the US. Separation from family upon immigration introduces more difficulty to the immigration experience. Yet protective factors such as family cohesion may buffer potential psychological distress. The present study will examine the two following research questions. First, is there a difference in psychological distress experienced by Latina young women who report separating from their family in comparison to those who did not experience familial separation at immigration. Second, does a potentially deleterious effect of immigration on familial attachment underlie or mediate the hypothesized positive association between separation at immigration and psychological distress. Participants were Latina young women who ranged from 18-23 years-old, were unmarried, and had to have resided in the US for 36 months or less. I used structural path analysis to examine hypothesized associations among separation status, attachment to family, and psychological distress. Findings aim to inform mental health interventions for Latina young adults who immigrate to the US without family.

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## CHAPTER 1

### INTRODUCTION

The population of foreign-born Latinxs has recently increased to 20 times what it was in 1960 (Flores, 2017). By 2065, the Latinx population in the United States is projected to grow to 107 million (Flores, 2017). Given these estimates, mental health professionals are tasked with better understanding Latinx culture and how it relates with the mental health of Latinx clients and communities to provide culturally competent, ethical care – particularly for Latina women. Latina women are twice as likely as Latino men to experience high depressive symptoms (Wassertheil-Smoller, Arredondo, Cai, Castaneda, Choca, Gallo, Jung, LaVange, Lee-Rey, Mosley, Penedo, Santistaban, & Zee, 2014). Rates of depression and other mental health issues in Latina women are also higher than non-Latina White women (Dillon, Ertl, Verile, Siraj, Babino, & De La Rosa, 2019; Huang, Wong, Ronzio, & Stella, 2007).

Several factors contribute to this mental health disparity, such as limited access to healthcare for non-US citizens. This as well as the high cost of services without health insurance in the US prevents undocumented immigrants from receiving necessary healthcare (Artiga & Diaz, 2019). Mental health care access beyond emergency services and preventative care provided at community health centers is lacking. Hence, consistent, specialty services such as mental health are often inaccessible (Artiga & Diaz, 2019). As a result, Latina immigrants are not able to access necessary mental healthcare to appropriately address mental health symptoms.

While literature has described challenging and traumatic experiences endured by Latinx immigrants during immigration (Belknap, 2016; Keller, Joscelyne, Granski, &

Rosenfeld, 2017), distress does not end after arriving in the US. Psychological distress sustained after settling in the US has been addressed in a large body of research (e.g., Dillon et al., 2019; Valdez, Dvorscek, Budge, & Esmond, 2011). Findings suggest that discrimination, poverty, and living in poor communities puts foreign-born Latina women at higher risk for depression, suicide, and psychological distress (Dillon et al., 2019). Thus, immigration is not the mythical panacea for all potential hardships that occur in one's country of origin, rather that it may simply shift and take different forms to accommodate a new lifestyle.

Studies in the past largely have focused on the mental health of Latina immigrants who have lived in the US for many years or decades. Few studies have identified what social or cultural factors play into psychological distress experienced soon after arrival (Dillon et al., 2019). By examining what factors play a role in psychological distress experienced during the first several months in the US, the counseling and allied mental health professions could better address the needs that are important to this population to reduce or eliminate the aforementioned health disparity of psychological distress (Camacho, González, Castaneda, Simmons, Buelna, Lemus, & Talavera, 2015; Capielo, Delgado-Romero, & Stewart, 2015; Chavez-Korell & Torres, 2014; Dillon et al, 2019; Torres & Taknint, 2015). Evaluating the most recent depressive symptoms experienced by Latina immigrants and their correlates could enhance efforts in the field of counseling to support Latina immigrants and fulfill the ethical responsibility in adequately treating their presenting concerns.

### **The Importance of Attachment/Family Cohesion/*Familismo***

*Familismo* is a traditional value and cornerstone of Latinx culture. It is characterized by “loyalty, cohesiveness, and obedience within the family” (Stein, Gonzalez, Cupito, Kiang, & Supple, 2015). Within Latinx culture the responsibility of including the family is embedded into every decision, behavior, and action. For recent Latinx immigrants, approaching the idea of family life from the perspective of American individualism may lead to misunderstanding and confusion. It is important to consider the role of familismo in a Latinx individual’s life, as these cultural responsibilities will inevitably carry their way into mental health and the overall well-being of Latinx individuals. Therefore, family cohesion from familismo is an important component in ensuring positive mental health outcomes in the Latinx population. Such family cohesion is considered a protective factor from health risks and is inversely linked with lower levels of psychological distress (Rivera, Guarnaccia, Mulvaney-Day, Lin, Torres, & Alegria, 2008). It is possible that a loss of family cohesion leaves Latinx individuals vulnerable to various mental health disorders (Sauceda et al., 2018). Family cohesion among Latinx also is a predictor of positive social skills with peers and self-efficacy (Leidy, Guerra, & Toro, 2010). Hence, family cohesion has implications on how Latinx individuals see their own abilities to succeed. Self-efficacy as affected by family cohesion will influence attempts at achieving goals. The bonds Latina women have with those in their lives are vital to their success. It is necessary to note the vitality of familismo and family cohesion in Latinx culture. In order to better assist the Latina immigrant population, priorities within their culture must be accounted for.

The strong levels of attachment with family that are indicative of family cohesion have been suggested to assist in reducing psychological distress and health risk behaviors

of Latina young adults who have recently immigrated to the US (Dillon et al., 2019). For instance, support from family members and peers in US Latina college students is essential to their academic success by lowering stress levels (Castillo & Hill, 2004). Close attachment in Latina mother-daughter relationships is also protective against risky sexual behaviors (Kanamori, Weissman, De La Rosa, Trepka, Rojas, Cano, Melton, & Unterberger, 2016). The attachment to an inner circle of support seems vital to Latina women's success. Therefore, it could be inferred that the absence of these connections put a Latina individual at risk for negative mental health outcomes.

### **The Effects of Separation on Mental Health of Latinx Young Adult Women**

Given the importance that family cohesion has in the Latinx population, separation from the family unit can have detrimental effects on mental health. As expected, Latinx children who are separated from their parents report higher symptoms of anxiety and depression in the years following their arrival in the US (Suárez-Orozco, Bang, & Kim, 2011). Conversely, support from family is considered a protective factor from psychological distress (Valdivieso-Mora, Peet, Garnier-Villareal, Salazar-Villanea, & Johnson, 2016). In families who were separated by means of deportation, depression symptoms tend to occur (Gindling & Poggio, 2010). Families who migrate in stages are also subject to depressive symptoms and many mental health ramifications if a certain degree of contact is not maintained (Suárez-Orozco, Todorova, & Louie, 2002).

Families who have experienced separation note that they must cope with relational and familial distress due to being separated (Gindling & Poggio, 2010). At times immigrant families can spend up to five years or more apart from each other before they are reunited (Suárez-Orozco, Todorova, & Louie, 2002). Along with the loneliness

of being in a foreign country, the lack of support previously provided by family may lead to grief, which can lead to depression and other mental health issues (Shattell, Smith, Quinlan-Colwell, & Villalba, 2008). Mata-Greve & Torres (2019) found that such a sense of separation can predict alcohol misuse, depression, and anxiety.



## CHAPTER 2

### DESIGN AND METHODOLOGY

#### **The Present Study**

Given the aforementioned review of the literature, the present study will test the following research questions/hypotheses:

- Is there a difference in psychological distress experienced by Latina young women who recently immigrated to the US with their family in comparison to women who were separated from family upon immigration?
  - Women who were separated from family upon arrival to the US will indicate more psychological distress during the initial year in the US in comparison to counterparts.
- Is the deleterious effect of separation from family on attachment with family an underlying factor that mediates the positive relationship between separation at immigration and psychological distress?
- The positive association between separation and psychological distress will be mediated or “explained (in part) by” (Frazier, Tix, & Barron, 2004) feeling less attachment to family during the first year in the US. That is, (a) women who experience separation will indicate less familial attachment than peers, (b) women who indicate less familial attachment will indicate more psychological distress, and (c) the positive association between separation and distress will be explained by feeling less attached to family (see Figure 1).

These hypotheses were conducted while accounting for the potential covarying influences of participants' age, time in US, socioeconomic status, documentation status,

and Latinx ethnicity on psychological distress. In addition, marital status was controlled for by examining responses from unmarried participants at the time of assessment.

## **Method**

### **Participants**

The present study is a secondary analysis study using the baseline data of a three-year longitudinal study of social and cultural determinants of health disparities among 433 unmarried, recently immigrated, young adult Latina participants. To be eligible for the study, participants had to have resided in the US for 36 months or less ( $M = 12.00$  months,  $SD = 9.94$  months). Ages of participants ranged from 18 to 23 years old ( $M = 20.81$  years,  $SD = 1.80$  years). Motivations for immigration ranged from economic (57.9%), to reunite with family (28.6%), and/or political (5.3%). Approximately, 57% of participants reported earning a degree similar to a US high school diploma, and 30% had earned either a bachelor's or trade school equivalent degree. Approximately 66% of participants were unemployed at the time of assessment. Seventeen percent of participants reported an undocumented immigration status. Participants identified as Cuban (34%), Colombian (11.1%), Nicaraguan (7.5%), Honduran (6.4%), Peruvian (5.7%), Mexican, (5.1%), Venezuelan (4.9%), Ecuadorian (3.6%), Panamanian, (3.6%), and Dominican (3.0%). The remaining 15% were from Argentina, Bolivia, Chile, Costa Rica, El Salvador, Guatemala, Paraguay, or Uruguay.

### **Measures**

Interviews were conducted in Spanish by research assistants with participants. Interviewers administered measures that were either validated in Spanish or English-only versions of measures. English-only measures were adapted via (a) translation or back

translation, (b) modified direct translation, and (c) checks for semantic and conceptual equivalence by the research team to ensure accurate translation from English to Spanish (Behling & Law, 2000).

### *Psychological distress*

To fully understand the range of potential psychological distress experienced by participants, distress level was measured via three global indexes of the Spanish version of the Brief Symptom Inventory (BSI; Derogatis & Fitzpatrick, 2004): the Global Severity Index (GSI), the Positive Symptom Total (PST), and the Positive Symptom Distress Index (PSDI). The BSI is a 53-item self-report inventory that measures how much an individual has felt bothered in the past week by various symptoms using a 5-point Likert-type scale (0 = Not at all, 4 = Extremely). Items include, “Feeling that people are unfriendly or dislike you” and “Feelings of worthlessness.” The GSI score indicated each participant’s level of psychological distress, and higher scores indicated more problematic functioning. The GSI was calculated using the sums for the nine symptom dimensions plus the four additional items not included in any of the dimension scores and dividing by the total number of items to which the individual responded. The GSI has demonstrated evidence of reliability (Derogatis & Fitzpatrick, 2004). The present study’s sample yielded a Cronbach’s alpha of .98 for the GSI.

The Positive Symptom Total (PST) represented a count of the number (or breadth) of symptoms measured by the BSI. It was calculated by summing the number of nonzero responses on all 53 items. The Positive Symptom Distress Index (PSDI) was calculated as the average of all nonzero-rated BSI items. Thus, the PSDI measured intensity rather than number of symptoms. Evidence of construct validity of the Spanish

version of the BSI has been reported based on measurement invariance testing (Hoe & Brekke, 2009).

#### *Sociodemographic variables*

Participants provided their socioeconomic and demographic information, including age (in years), country of origin, education level, time in the US (in months), employment status, perceived childhood socioeconomic status (When you were growing up, compared to other families, did you feel that your family was: 1 = Poorer than most, 2 = About the same as most, 3 = Richer than most), immigration documentation status (0 = undocumented, 1 = documented). Due to the predominance of Cuban participants, country of origin was accounted for (0 = non-Cuban, 1 = Cuban).

#### *Separation from family*

Separation from family was calculated by the location of family during immigration. Participants were asked if they came to the US alone (0 = No, 1 = Yes), if they had a family member in the US before immigrating, (0 = No, 1 = Yes), or if a family member came to stay with them after immigration (0 = No, 1 = Yes).

#### *Attachment to Family*

Participants completed mutual trust and communication subscales of the Inventory of Parent and Peer Attachment (IPPA; Armsden & Greenberg, 1987) to quantify the quality of attachment between participants and their mothers and fathers. Items included: “I would like to have a different mother” (reverse coded item; Trust); “My father knows when I am upset about something” (Communication); and “My mother expects too much of me” (reverse coded item; Trust). Twenty-five questions from the Trust and Communication subscales were asked per parental relationship using a 5-point

Likert-type scale (1 = Never or almost never true, 5 = Always or almost always true). Items were averaged for each member of participants' parents to determine a total score for overall attachment to one's parents. Higher total scores reflected higher levels of attachment. Adequate psychometric statistics have been reported for the IPPA via tests of internal consistency and factor analyses supporting construct validity in a sample of Latina women (De La Rosa, 2010). Internal consistency of the attachment to parents total scores in the present study ( $\alpha = .97$ ).

### **Procedure**

The institutional review board of a large university in the Southeastern United States approved the study. Eligibility criteria included: (a) being a Latina woman between the ages of 18 and 23 years old and (b) having recently immigrated to the US from a Latin American country (i.e., within the 36 months prior to baseline). One of four bilingual research assistants conducted informed procedures and interviews with participants in Spanish. Bilingual assessors conducted the interviews in a private location chosen by participants or in university offices.

To recruit participants, researchers employed respondent-driven sampling (RDS). RDS is an instrumental recruitment method for obtaining participants from hard-to-reach populations, such as immigrants and undocumented individuals (Salganik & Heckathorn, 2004). RDS entails requesting that each eligible participant recruit three others in her social network who meet study inclusionary criteria, and then consenting individuals refer three new potential participants. This process can continue up to five times, at which point a new, unconnected individual's referral is followed to avoid skewing the sample with participants who are too socially interconnected. Seed participants in the present

study were recruited through advertisements at various community-based agencies (e.g., language schools, legal aid organizations), Latinx health fairs, and online postings to Craigslist. Participants were paid \$45 for the assessment interview. Assessment of participants occurred between April 2013 and April 2014.

## **Analytic Plan**

### *Preliminary Analyses*

Before conducting our analysis, violations to the assumption of univariate normality were assessed for all continuous variables in the study. If a variable yielded a skewness index of  $\geq 3.00$  and/or, kurtosis index of  $\geq 10$ , it was considered non-normally distributed (Kline, 2010). Table 1 presents descriptive statistics for the variables used in the proposed conceptual model (see Figure 1 for analytic model). We correlated all variables in the proposed model to assess for evidence of discriminant validity and multicollinearity across constructs by ensuring that correlation coefficients between variables were  $< .70$  (Tabachnick & Fidell, 2007). Bivariate correlation coefficients between all variables were all  $< .70$  (see Table 1).

### *Primary Analysis*

I conducted structural path analysis to examine hypothesized associations among separation status, attachment to family, and psychological distress while accounting for covariates (age, month in US, childhood SES, immigration documentation status, Latinx ethnicity) (see Figure 1). The default estimator for this type of analysis in Mplus is a robust weighted least squares estimator (Muthén & Muthén, 2020). Our primary path analyses were comprised of three steps: (a) testing our proposed model to determine model fit, (b) estimating the significance of the hypothesized direct effects, and (c)

estimating the significance of the hypothesized indirect effects using bootstrapping procedures (Cheng & Mallinckrodt, 2009; Shrout & Bolger, 2002). The bootstrap procedure resamples from the original sample to obtain a more precise standard error estimate (MacKinnon, Lockwood, & Williams, 2004). I followed the procedure of McDermott and Lopez (2013) and others by creating 2,000 bootstrap samples.

I evaluated our proposed path model using standard model fit criteria: the comparative fit index (CFI), the Tucker Lewis Index (TLI), and the root-mean-square-error of approximation (RMSEA), with a 90% confidence interval. CFI values above .90 reflect adequate fit (Hu & Bentler, 1998), and those above .95 represent excellent fit (Tomarken & Waller, 2005). TFI values over .90 are considered acceptable (Hu & Bentler, 1998). RMSEA values below .08 represent adequate fit (Hu & Bentler, 1998), and those below .05 represent excellent fit (Hancock & Freeman, 2001).

## CHAPTER 3

### RESULTS

#### **Preliminary Analyses**

The means, standard deviations, and zero-order correlations among the variables are presented in Table 1. No study variables violated assumptions of normality.

#### **Primary Analysis**

Structural path analysis was conducted to examine hypothesized associations among separation status, attachment to family, and psychological distress while accounting for covariates (age, month in US, childhood SES, immigration documentation status, Latinx ethnicity) (see Figure 1).

In step one, we tested model fit for the direct and indirect models. Standard model fit criteria suggested that the proposed model provided excellent fit to the data, CFI = .99, TLI = .94, and RMSEA = .05, 90% confidence interval [.00, .10].

In step two, we estimated the significance of the hypothesized direct effects (i.e., the model without attachment to family as a mediator). Results are found in Table 2. Women who came to the US with family indicated more psychological distress symptoms than women immigrating to US without family. Women who had been in US longer at time of assessment also indicated more psychological distress symptoms than peers. Women who indicated more attachment to their family reported less psychological distress symptoms and less intensity of symptoms.

In step three, we estimated the significance of the hypothesized indirect effects using bootstrapping procedures. See Table 3 for results. As hypothesized, participants' attachment to parents mediated the link between immigrating alone and intensity of



distress symptoms. The association between immigrating alone and experiencing more intense distress symptoms was explained by two indirect associations: (a) women immigrating alone reported lower attachment to parents and (b) women indicating more attachment reported less distress symptoms.

Also as hypothesized, participants' attachment to parents mediated the link between reports of having family in the US prior to immigration and intensity of distress symptoms. The association between having family in the US and experiencing less intense distress symptoms is explained by two indirect associations: (a) women with family in the US reported more attachment to parents and (b) women indicating more attachment reported less distress symptoms.

## CHAPTER 4

### DISCUSSION

The purpose of this study was to further understand the social and cultural factors that impact psychological distress upon recent immigration. The study focused on the relationships between attachment to family, location of family during immigration, and psychological distress among Latina recent immigrants. Familismo is an important consideration in this study due to its importance within Latinx culture and impacts on mental health (Stein, Gonzalez, Cupito, Kiang, & Supple, 2015). Family cohesion and attachment, proxy variables for familismo, are two factors that protect against various health risks (Rivera et al., 2008; Saucedo et al., 2018). Distance created while Latinxs immigrate to the US pose challenges to maintaining connection (Gindling & Poggio, 2010). Examining how the strength or weakness of family attachment may cause psychological distress after immigration can provide more insight into the Latinx immigrant experience and mental health implications of immigration and separation from family for the field of counseling psychology to intervene.

Participants' attachment to parents mediated the relationship between immigrating to the US alone and the intensity of distress symptoms. That is, women immigrating alone reported lower attachment to parents in comparison to peers. Furthermore, women who indicated less attachment to parents also indicated more intense psychological distress compared to peers; suggesting that it is lower attachment to family that explains why women immigrating alone may present with more intense psychological symptoms. This finding informs past studies (Rivera et al., 2008; Valdivieso-Mora et al., 2016)

suggesting more attachment with family is linked with less distress among recent Latinx immigrants.

Attachment to parents also mediated the inverse relationship between having family in the US prior to immigration and intensity of distress symptoms during initial year in US. The link between having family in the US and experiencing less intense distress symptoms was explained by the finding that the women with family in the US reported higher attachment to parents. This finding expands upon past studies suggesting the importance of familismo and how it may be lacking in women immigrating alone or without family in US during their initial year after immigration (e.g., Castillo & Hill, 2004, Dillon et al. 2019, Kanamori et al. 2016).

In contrast to existing studies of Latina women in the US, this study is unique due to its focus on young adult women who very recently immigrated to the US at the time of assessment. Most studies focus on immigration in later adult years, long after initial immigration to the US. Finding literature on how this process impacts young adult Latina women is not as prominent in this group.

This study was also unique due to the sample selected being unmarried Latina women. Accounting for marital status in this manner provides a clearer idea of how psychological distress is experienced by women without a partner (and presumed social support) at the time of immigration. The focus on unmarried, young adult Latina women fills the space that previous studies have not explored as of yet by highlighting their experience.

Although this study covers research points that have not been looked at previously, there are limitations. One point is the recruitment used in sampling.

Respondent Driven Sampling (RDS) is useful for recruiting populations such as undocumented immigrants. However, this means that sampling is not necessarily representative (Passel & Cohn, 2011).

In addition, the geographical location of this study limited what groups were represented. Groups who may not hold a large representation in South Florida are not as visible, and therefore may not see as many benefits to their group from this study. In studies to come, broadening the geographical locations and regional differences is encouraged to increase representation and contribute to the knowledge gained from this study.

This study sheds a light on the powerful role variations familial attachment plays when considering effects of family separation on the mental health of Latina young adults in the first year after immigration to the US. These findings contribute to the growing body of literature that examines the roles in which the family plays to Latinx wellbeing in the immigration and acculturation process.

As mentioned, the Latinx population in the United States is growing (Flores, 2017). The demand for culturally appropriate interventions will align with a need for increase in understanding of the experiences of the Latinx population. Although many studies have covered the unique importance and protective influence of Latinx cultural values such as familismo, few studies have illustrated (a) how family separation at immigration is linked with psychological distress, and (b) how separation impacts family attachment in a way that it appears to be a mechanism for the distress after immigration. Hopefully, by highlighting this experience, mental health professionals can be vigilant about the effects of separation from family on psychological distress during

the initial year in the US. Such a realization may improve accurate diagnoses with such clients; for instance, decipher acute stress versus adjustment disorder or depression. Moreover, the results concerning the mediating role of familial attachment may allow for enhanced treatment planning and culturally competent interventions targeting effects of immigration on familismo for women separated from family among other areas.

With a more well-rounded concept of the contributors to the psychological distress of Latina young adults, clinicians can be more informed on what resources and therapeutic interventions to offer clients. Connection to culture and community are important in avoiding potential immigration-related distress (Dillon et al., 2019). Identifying community resources and referral services that may address the disconnect would do well to alleviate social isolation that is connected with the experience of immigrating to a new country and the acculturation process.

Findings of this study can influence future research by highlighting the relationships between family attachment, separation during immigration, and psychological distress. These relationships show how Latina young adults experience a difficult yet crucial point in their lives. Focusing in on this aspect of the Latina young adult's experience can inspire future research to understand how to serve this population and examine other factors that relate to this study and its variables.

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APPENDIX A  
LIST OF TABLES

Table 1. Means, Standard Deviations, and Correlations of Study Variables

Variable	M, Mdn, or %	SD	1	2	3	4	5	6	7	8	9	10	11
1. BSI GSI	M = .35	.67	1										
2. BSI PST	M = 9.42	13.73	.88**	1									
3. BSI PSDI	M = 1.47	.76	.75**	.50**	1								
4. Attachment	M = 3.58	.68	-.08	-.06	-.23**	1							
5. Age	Mdn = 21	1.82	-.02	-.02	-.01	.08	1						
6. Months in US	M = 11.53	9.94	.01	.11*	-.18**	.25**	.02	1					
7. Childhood SES	M = 2.00	.48	.04	.02	-.01	.04	-.05	.04	1				
8. Documentation Status	17% undocumented	.38	-.07	-.06	-.14*	.11*	.05	.16**	.13**	1			
9. Immigrating alone	83.6% immigrated alone	61.36	.03	.04	-.01	-.01	.03	.06	0	-.03	1		
10. Family in the US prior to immigration	64.3% had family in the US prior to immigration	.48	-.01	.08	-.31**	.30**	.03	.39**	-.01	.23**	-.05	1	
11. Family in the US after immigration	16.6% had family in the US after immigration	.37	.01	.06	-.13*	.12**	-.02	.08	.01	.07	-.14**	.24**	1

Note: BSI GSI = Brief Symptom Inventory Global Symptom Inventory, BSI PST = Brief Symptom Inventory Positive Symptom Total, BSI PSDI = Brief Symptom Inventory Positive Symptom Distress Index, \* =  $p < .05$ , \*\* =  $p < .01$

Table 2. Standardized path coefficients, standard errors, and *t*-values for general theoretical model

Path	Estimate	<i>SE</i>	<i>t</i>	<i>p</i>
Immigrating alone → BSI GSI	.030	.057	.518	.605
Family in the US prior to immigration → BSI GSI	.025	.059	.431	.667
Family in the US after immigration → BSI GSI	-.003	.036	-.071	.943
Parental Attachment → BSI GSI	-.083	.048	-1.717	.086
Age → BSI GSI	-.012	.044	-.284	.777
Months in US → BSI GSI	.056	.057	.980	.327
Perceived childhood socioeconomic status → BSI GSI	.036	.062	.584	.559
Legal Status → BSI GSI	-.038	.056	-.678	.498
Immigrating alone → BSI PST	.121	.047	2.563	.010
Family in the US prior to immigration → BSI PST	.107	.058	1.835	.066
Family in the US after immigration → BSI PST	.031	.044	.707	.480
Parental Attachment → BSI PST	-.105	.050	-2.089	.037
Age → BSI PST	-.017	.044	-.384	.701
Months in US → BSI PST	.161	.053	3.055	.002
Perceived childhood socioeconomic status → BSI PST	.023	.053	.445	.656
Legal Status → BSI PST	-.038	.056	-.690	.491
Immigrating alone → BSI PSDI	-.054	.064	-.837	.403
Family in the US prior to immigration → BSI PSDI	-.110	.107	-1.026	.305
Family in the US after immigration → BSI PSDI	-.067	.041	-1.626	.104
Parental Attachment → BSI PSDI	-.169	.053	-3.206	.001
Age → BSI PSDI	.025	.055	.455	.649
Months in US → BSI PSDI	-.047	.054	-.867	.386
Perceived childhood socioeconomic status → BSI PSDI	.022	.058	.374	.709
Legal Status → BSI PSDI	-.017	.088	-.193	.847

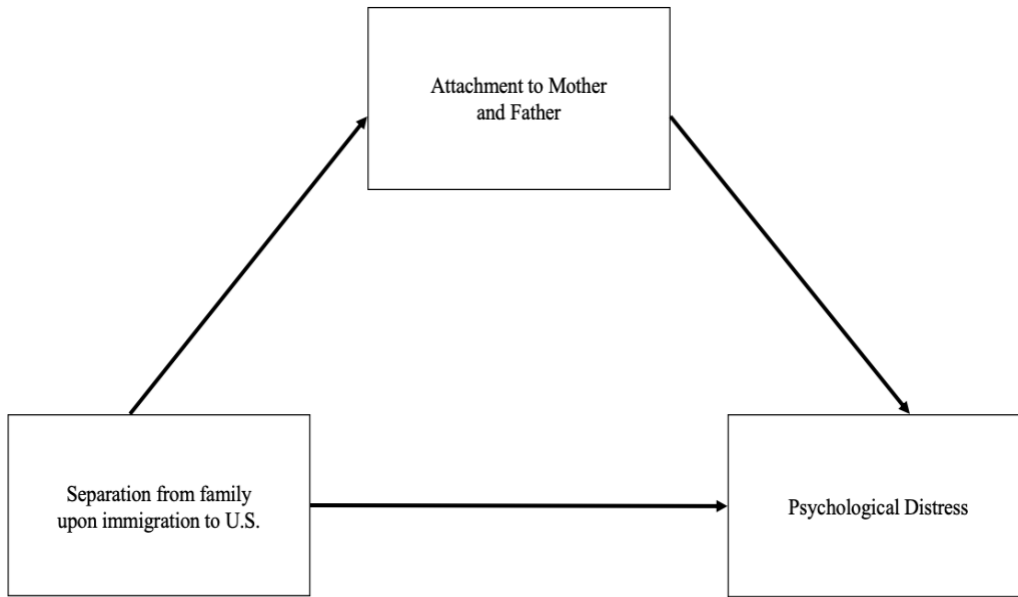
*Note:* BSI GSI = Brief Symptom Inventory Global Symptom Inventory, BSI PST = Brief Symptom Inventory Positive Symptom Total, BSI PSDI = Brief Symptom Inventory Positive Symptom Distress Index

Table 3. Specific indirect effects and their respective confidence intervals for the path model for each sample

Path	Indirect effect	Bias-corrected 95% CI
Immigrating alone → Parental Attachment → BSI GSI	0.010	-0.004, 0.023
Family in the US prior to immigration → Parental Attachment → BSI GSI	-0.025	-0.053, 0.004
Family in the US after immigration → Parental Attachment → BSI GSI	-0.006	-0.015, 0.003
Immigrating alone → Parental Attachment → BSI PST	0.012	-0.002, 0.027
Family in the US prior to immigration → Parental Attachment → BSI PST	-0.031	-0.062, 0.000
Family in the US after immigration → Parental Attachment → BSI PST	-0.007	-0.017, 0.003
Immigrating alone → Parental Attachment → BSI PSDI	0.020	0.001, 0.039
Family in the US prior to immigration → Parental Attachment → BSI PSDI	-0.050	-0.085, -0.015
Family in the US after immigration → Parental Attachment → BSI PSDI	-0.011	-0.026, 0.004

Note: BSI GSI = Brief Symptom Inventory Global Symptom Inventory, BSI PST = Brief Symptom Inventory Positive Symptom Total, BSI PSDI = Brief Symptom Inventory Positive Symptom Distress Index

APPENDIX B  
LIST OF FIGURES



*Figure 1.* Proposed model.