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Hope and Burden among Latino Families of Adults with Schizophrenia

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Abstract

This study examined hope and family burden among Latino families of individuals with schizophrenia. The sample consisted of 54 family members, one family member per outpatient adult recruited from public mental health programs in a diverse urban community. Hierarchical linear regression analyses were used to test the hypothesis that the family member's increased hope for the patient's future would be associated with decreased family burden beyond effects explained by the patient's length of illness and severity of symptoms. Results supported the study hypothesis. Family hope for the patient's future was associated with four of five types of family burden. Findings point to the prominent role of hope as a source of resilience for Latino families dealing with severe mental illness of a loved one.

Keywords

Severe Mental Illness; Hispanic; Caregivers; Family Burden; Resilience; Community Mental Health

Family members are often the first to confront the reality of a loved one's diagnosis of a severe mental illness, such as schizophrenia. This can be overwhelming for the family because such disorders typically begin during young adulthood and are characterized by an illness course that can be debilitating, episodic, and persistent over a lifetime. Treatment usually involves ongoing psychiatric services in the mental health system of care, but family members generally remain the primary source of support for coping with the day-to-day management of the illness (U.S. Department of Health and Human Services, 2009).

An estimated 30–65% of adults with serious mental illness live with family members (Murray-Swank, Dixon, & Stewart, 2007). A patient's living situation has been found to vary significantly across ethnic groups. A multicultural study of family caregiving found that 75% of Latinos and 60% of African Americans lived with their families, compared to 30% of European American patients with severe mental illness (Guarnaccia, 1998). Studies have consistently found that a majority of Latinos of Mexican origin with schizophrenia live with family members in the community (Barrio, Yamada, Hough, et al., 2003; Jenkins & Schumacher, 1999; Kopelowicz, Zarate, Gonzalez Smith, Mintz, & Liberman, 2003;

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Magaña, Ramírez García, Hernández, & Cortez, 2007; Ramírez García, Hernández, & Dorian, 2009). These findings exemplify the caregiving ideology within ethnic cultures that reflects adaptive attributions and expectations regarding the loved one's illness (Guarnaccia, 1998; Pickett, Cook, & Heller, 1998). Latino families in particular express great hope, optimism, and faith regarding long-term outcomes of their loved one's mental illness (Guarnaccia, 1998).

In most families, the transition from family member to primary caregiver falls on one key member, usually a parent, sibling, or spouse (Barrio & Yamada, 2005). The primary caregiver's experience has been examined in studies that focused not only on the burden of care but also on ways in which family members cope with the mental illness of a loved one (Hatfield, 1994; Heru, 2000; Jenkins & Schumacher, 1999; Magaña et al., 2007). Examining how potential protective factors operate in the caregiving experience of Latino families may reveal sources of cultural resilience that can be harnessed and enhanced in treatment approaches that benefit the patient and the family (Valle, Yamada, & Barrio, 2004). Protective factors refer to resources such as family hope that are used by families to ameliorate difficult experiences resulting from the illness (Rutter, 1987). A study with low-acclulturated Latino family caregivers of patients with severe mental illness found that when caregivers interacted with the patient, they focused on enhancing patient well-being by engaging with them in various activities (Parra & Guarnaccia, 1998). Family interaction and involvement with loved ones experiencing mental illness served as a protective factor for these patients.

Because providing support to family members is highly valued in Latino culture, family contact can be seen to function as a protective factor for patients. Increased family contact has been associated with better psychosocial functioning (Guada, Brekke, Floyd, & Barbour, 2009). Increased weekly family contact was associated with lower rates of relapse for Mexican American outpatients compared to their European American counterparts (López et al., 2004). Another study found that family cohesion was associated with lower levels of emotional distress for Latino family members of individuals with schizophrenia but not for European American family members (Weisman, Rosales, Kymalainen, & Armesto, 2005). Similarly, a recent study with caregivers of individuals with schizophrenia found that caregivers who perceived themselves as being connected with others and having high interdependence were less affected by burden (Suro & Weisman de Mamani, 2012). These findings suggest that level of family cohesion and interdependence has implications for family well-being and may serve as a protective factor for burden. Examination of potential protective factors can provide an opportunity to learn about these resources or strengths to augment them within family systems (Horton & Wallander, 2001; Valdez, Abegglen, & Hauser, 2012). This can inform the inclusion of such resources in treatment for patients and families, thereby benefiting family functioning.

HOPE AS A POTENTIAL PROTECTIVE FACTOR

Studies have found that hope is associated with positive adaption to stressors (Eggerman & Panter-Brick, 2010; Ong, Edwards, & Bergeman, 2006). Among family members, hope is conceptualized as a positive state of being with a future orientation characterized by positive

expectations for the well-being of the relative with schizophrenia (Kylmä, Juvakka, Nikkonen, Korhonen, & Isohanni, 2006). Hope is considered a multidimensional dynamic process associated with resilience—a greater ability to cope successfully—among individuals experiencing stressful life events, including those associated with caregiving (Horton & Wallander, 2001; Kylmä et al., 2006; Ong et al., 2006). Several studies have examined hope among key family members of persons with schizophrenia and most have suggested that it has positive consequences in terms of coping with the illness (Bland & Darlington, 2002; Karanci, 1995; Tuck, du Mont, Evans, & Shupe, 1997). Although an intervention trial for Latino outpatients with schizophrenia that examined hope for the future and caregiving burden among key family members did not find significant differences among family outcomes (Kopelowicz et al., 2003), another study that investigated the Latino family caregiving experience using in-depth interviews consistently found that hope and faith served as a positive source of support in dealing with family burden (Guarnaccia, Parra, Deschamps, Milstein, & Argiles, 1992).

Cultural conceptions of mental illness bolster the argument that hope represents a potential protective factor among low-aculturated Mexican American families (Jenkins, 1988). Mental illness is viewed on a continuum by Mexican Americans, which allows the family to maintain hope for their loved one's improvement. Research with Mexican Americans has indicated that rather than viewing mental illness as a static diagnosis with a poor prognosis, families often view it using idioms of distress, such as *nervios* (Barrio & Yamada, 2010; Guarnaccia et al., 1992; Jenkins, 1988; Weisman, Gomes, & López, 2003; Weisman & López, 1997). By conceptualizing mental illness with idioms of distress that allow for and support hope for change, Latino families are better able to cope with the daily challenges of managing the illness of a family member (Guarnaccia et al., 1992; Jenkins, 1988).

FAMILY BURDEN OF CARE

Family burden refers to the effects of care induced by the various responsibilities experienced by caregivers (Awad & Voruganti, 2008). Family burden has been conceptualized as having objective and subjective dimensions, with objective components referring to concrete factors such as the financial impact of the illness on the family, whereas subjective components relate to the caregiver's perception or appraisal of burden (Awad & Voruganti, 2008; Maurin & Boyd, 1990). A study comparing burden among key family members of individuals with schizophrenia found they experienced less social support and more subjective and objective burden than family members of those with serious medical conditions (Magliano, Fiorillo, De Rosa, Malangone, & Maj, 2005).

Perceived family burden has been found to mediate the relationship between patient symptoms and caregiver depression (Magaña et al., 2007). This finding indicates a strong association of perceived family burden with caregiver distress. Moreover, the study also found that Latino families had limited instrumental resources to provide care for family members with an illness, as evidenced by their low socioeconomic status, which in turn was associated with increased caregiver depression (Magaña et al., 2007). Latino families may consequently encounter challenges related to contextual factors such as low socioeconomic status, language barriers, and poor access to services (Guarnaccia, 1998). However, it may

be difficult for family members to acknowledge caregiver burden because they may view caregiving as a culturally expected aspect of family life (Breitborde, López, & Kopelowicz, 2010; Grandón, Jenaro, & Lemos, 2008; Guarnaccia, 1998).

This study examined the relationship between hope and burden of care among Latino family members of persons with schizophrenia. On the basis of the literature addressing the positive role of hope in Latino families, we hypothesized that increased hope among family members would be associated with decreased family burden. In addition, we examined the relationship between hope and components of family burden to gain a greater understanding of these relationships and shed light on the potential protective mechanisms of hope related to family members' experience of caring for a loved one with schizophrenia.

METHODS

Sample

The sample consisted of 54 families with complete baseline data from a family psycho-education-based intervention trial (Barrio & Yamada, 2010). The intervention study recruited outpatient adults diagnosed with schizophrenia and invited each patient to identify a key family member to participate in the family-focused treatment. Patients selected a key family member they considered to be the most involved in their care and whom they relied on the most for ongoing support. In addition, the key family member needed to have a minimum of weekly contact with the patient. Patients were recruited from two community-based mental health programs in an ethnically diverse urban community in Los Angeles, California. Patients were excluded from the study if they met criteria for alcohol or drug dependence during the previous 6 months or if they had an identified neurological disorder. Diagnoses were determined using clinical records and collateral reports from the treating clinician and on-site psychiatrist. The mean age for the patients was 35 years ($SD = 11.88$), and 40 patients (74%) were men. Most patients had never been married (74%), and participants had an average of 10 years ($SD = 4.06$) of education.

A great majority of patients (49, 91%), lived with the key family member, whereas the remaining five patients (9%) maintained at least weekly contact with the family member. Most family member participants were women (83%), with a mean age of 54 years ($SD = 12.61$). On average, family members had 7.6 years ($SD = 4.30$) of education and most were married (66%). In terms of relationship to the patient, family members included 31 parents (58%), eight siblings (15%), eight spouses (15%), and seven other types of family members, such as sons and aunts (14%).

The majority of study participants were of Mexican origin. Thirty patients (56%) were born in the United States, 22 (41%) were born in Mexico, and the remaining two were born in Central America. Family members were predominantly born in Mexico (44, 82%); six (11%) were born in the United States and four (8%) were born in Central or South America.

Patients were mostly English-dominant bilingual speakers, whereas family members were primarily monolingual Spanish speakers. Thirty-nine (72%) patients and 20 (37%) family members reported being fluent in or comfortable speaking English. More than half of patient

interviews (31, 57%) were conducted in English, and the majority of family member interviews (48, 89%) were conducted in Spanish.

Measures

Measures were translated and culturally adapted using established guidelines for cross-cultural equivalence, which accounted for semantic, content, and technical equivalence to address the cultural perspectives of Latinos of Mexican origin for this sample while also maintaining generalizability across Latino groups (Chavez, Matías-Carreló, Barrio, & Canino, 2007; Matías-Carreló et al., 2003; Wild et al., 2005). Data were collected by trained bilingual and bicultural research interviewers in each participant's preferred language. All participants provided written informed consent, under protocols approved by the university's Institutional Review Board and the County Department of Mental Health's Research Committee.

Family burden—We assessed family burden using the semi-structured Family Burden Interview Schedule (FBIS; Pai & Kapur, 1981). We used a shortened 20-item version of the instrument adapted by researchers during a previous study with a family sample of Latinos of Mexican origin (Kopelowicz et al., 2003). This version of the FBIS consists of a composite burden score and five subscales (family financial burden, routine family activities, family leisure, family interaction, and effect on physical and mental health of others) that measure objective burden on a 3-point scale ranging from 0 (*no burden*) to 2 (*severe burden*). Items include questions about any problems caused by “the lack of attention that your family member has for his family members” (routine family activities); whether the “family member's illness causes the immediate family to isolate from other relatives and friends” (family interaction); and whether the “family member's illness has caused some emotional problem in other family members” (effect on mental health of others). Based on the present sample, the composite burden score demonstrated excellent internal consistency ($\alpha = .92$). Internal consistency was similar for Spanish-speaking ($n = 48$, $\alpha = .91$) and English-speaking ($n = 6$, $\alpha = .94$) family participants.

Hope—The Hope for the Patient's Future Scale, adapted from the Miller Hope Scale (Miller & Powers, 1988), was developed during a study of Latino family members of patients diagnosed with schizophrenia (Kopelowicz et al., 2003). The measure provides a broad snapshot of hope in key family members and consists of 20 items ranked on a 5-point Likert scale ranging from 1 (*no hope*) to 5 (*a lot of hope*). Items included questions about how much hope family participants have that “the illness of your family member gets better,” “your family member will enjoy the good things in life,” and “your family member will be able to develop his/her own goals for the future.” The internal consistency was excellent ($\alpha = .96$) and remained unchanged among Spanish-speaking participants ($n = 48$); internal consistency among English-speaking participants ($n = 6$) was also excellent ($\alpha = .99$).

Patient psychiatric symptoms—The severity of the patients' psychiatric symptoms was measured using the Positive and Negative Syndrome Scale (PANSS; Kay, Fiszbein, & Opler, 1987), a well-established measure used with participants with schizophrenia (Bell, Lysaker,

Beam-Goulet, Milstein, & Lindenmayer, 1994). The PANSS consists of 30 items measuring positive, negative, and generalized symptoms scored by a trained rater on a 7-point Likert scale, with higher scores representing more severe symptoms. The scale has been validated and found to have good psychometric properties, with internal reliability ranging from .79 to .83 (Kay et al., 1987). The PANSS has been used with Latinos of Mexican origin in previous research and has been found to have good overall internal consistency ($\alpha = .86$) with this ethnic group (Barrio, Yamada, Atuel, et al., 2003). The internal consistency was excellent for the present sample ($\alpha = .90$), and in the good-to-excellent range for Spanish-speaking ($n = 23$, $\alpha = .80$) and English-speaking ($n = 31$, $\alpha = .93$) patients.

Patient length of illness—Length of illness was measured as the length of time between when the key family member first noticed the patient's symptoms and the patient's age at baseline.

Acculturation—The Acculturation Rating Scale for Mexican Americans (Cuellar, Harris, & Jasso, 1980) was used to examine the acculturation level of patients and family members. Patients had a mean score of 2.26 ($SD = 0.77$), which falls in the “Mexican-oriented bicultural” range, whereas family members had a mean score of 1.54 ($SD = 0.58$), which falls in the “very Mexican” range, indicating low acculturation. Internal consistency was excellent for all patients ($\alpha = .94$), and good for Spanish-speaking patients ($n = 23$, $\alpha = .89$) and English-speaking patients ($n = 31$, $\alpha = .78$). Internal consistency for this measure was also excellent for all family members ($\alpha = .93$), and good for Spanish-speaking ($n = 48$, $\alpha = .84$) and English-speaking ($n = 6$, $\alpha = .80$) family members.

Data Analysis

Prior to analyses, we transformed variables with high skewness and kurtosis based on a z value of $p < .001$ as well as examination of normal probability plots (Tabachnick & Fidell, 2007); hope was corrected using log transformation and patient length of illness was corrected using a square root transformation. Pearson bivariate correlation analyses were conducted to explore whether expected relationships among variables were significant and to develop a parsimonious model for our primary analyses.

We used hierarchical linear regression (HLR) as the primary analytic strategy to test the study hypothesis. HLR was used to examine the influence of family members' hope on family burden beyond the effects of patient symptoms and length of illness. We tested the composite family burden score as well as scores on the five family burden subscales to explore the association between hope and burden. A p -value of .05 was used to denote statistical significance. Analyses were performed using SPSS Statistics for Windows, Version 17.0. Chicago: SPSS Inc.

RESULTS

Patient symptoms were in the mild range based on the PANSS (see Table 1). The average length of illness was 12.78 years ($SD = 11.75$). Family members reported low levels of overall family burden based on total FBIS score, and the family interaction burden subscale

had the highest average score. The average level of hope was also high based on the Hope for the Patient's Future Scale.

Findings derived from the bivariate correlation analyses supported significant relationships between several variables. A longer duration of illness was associated with a decrease in the total family burden score and in one subscale score (routine family activities). We also found strong negative relationships between hope and the total family burden score and subscales scores, except for the family financial burden subscale.

Table 2 shows the two blocks of variables entered for the main analyses using HLR, including the control variable, length of illness, and hope during the second step. Length of illness accounted for 7% of the variance of family burden and hope accounted for 19% of the variance in the total family burden score. The adjusted R^2 was .23, indicating that almost one fourth of the variation in family burden was predicted by length of illness and family member's hope for the future.

Findings from HLR analyses of the five subscales supported the multidimensional conceptualization of family burden. Comparable results, including a similar adjusted R^2 , were found with each independent variable when the routine family burden subscale was examined as the dependent variable ($F(51, 2) = 10.08, p < .001$). However, hope was the only significant predictor for three types of family burden: leisure ($\beta = -.318, SE = .121, p < .05$), interaction ($\beta = -.424, SE = .121, p < .01$), and effect on health/mental health ($\beta = -.368, SE = .126, p < .05$). The family financial burden subscale model had no significant predictors.

DISCUSSION

Researchers have examined predictors of hope in families caring for a loved one with schizophrenia (Friedman-Yakoobian, Weisman de Mamani, & Mueser, 2009), as well as hope as a predictor of adaptation in families caring for a family member with Down syndrome (Truitt, Biesecker, Capone, Bailey, & Erby, 2012). However, these studies included primarily European American and college-educated samples, thereby limiting knowledge of the role of hope with other groups. This study's findings contributed to growing knowledge of Latinos, the largest ethnic minority group in the United States, comprising 16.7% of the population (U.S. Census Bureau, 2012). In particular, findings from this study's sample of low-aculturated Latino families of patients receiving public mental health services demonstrated that these families were able to harness high levels of hope that were strongly associated with decreased burden.

We found strong support for our hypothesis that level of hope for the future would be negatively associated with family burden. Our findings provided considerable evidence that hope is more strongly associated with family burden than the patient's length of illness. Although a recent study (Friedman-Yakoobian et al., 2009) examined hope as an outcome variable among families with a loved one with schizophrenia, this study and several others (Horton & Wallander, 2001; Ong et al., 2006) examined hope as a factor associated with a decrease in negative outcomes such as burden. Furthermore, we were able to detect a

positive relationship between hope and various types of burden reflecting the most challenging roles for family members, including family interaction, family leisure, and effects on the physical and emotional health of others (Awad & Voruganti, 2008). Interestingly, patient symptoms were assessed at the mild range and were not associated with burden for family members in this study. All patients were receiving outpatient treatment services, such as medications targeting psychotic symptoms, which may have been related to the mild symptomatic expression of the illness.

Consistent with previous research (Guarnaccia et al., 1992; Jenkins & Karno, 1992; Kopelowicz et al., 2003), family members in this study reported experiencing high levels of hope and low levels of burden. However, unlike Kopelowicz et al. (2003), we found a relationship between hope for the patient's future and family burden. Positive outcomes, such as a decrease in key family member distress, have been attributed to hope as a potential protective factor (Horton & Wallander, 2001). Because hope encompasses favorable perceptions about future outcomes, it can be seen as addressing cognitive responses to distress (Horton & Wallander, 2001). For key members of Latino families, having positive perceptions of their loved one's illness may alleviate the burden associated with their caregiving responsibilities. Furthermore, Latino families' high levels of hopefulness are indicative of an ability to see beyond the immediate stressful experience, which can be considered a form of resilience for these families.

Cultural aspects that influence how caring for relatives with an illness is perceived by family members may also be a factor in the low levels of reported family burden. Latino families may not view caregiving as outside the scope of their familial responsibilities, and thus not a burden. Some studies have suggested that families may actually benefit from caring for loved ones, as evidenced by reporting a closer relationship with the patient, finding greater meaning in life, and developing greater self-confidence and inner strength (Bauer, Koepke, Sterzinger, & Spiessl, 2012; Heru, 2000; Schwartz & Hadar, 2007; Veltman, Cameron, & Stewart, 2002; Zauszniewski, Bekhet, & Suresky, 2008). However, this should not create the impression that the responsibilities of caring for a loved one with schizophrenia do not result in levels of burden for Latino family members. Latino family members have reported negative outcomes as a result of their caregiving (Breitborde, López, Chang, Kopelowicz, & Zarate, 2009; Breitborde et al., 2010; Magaña et al., 2007). Further examination of how these families experience caregiving within their cultural value framework is required. Without a deeper understanding of the cultural expectations for caregiving in Latino families, mental health providers may perceive them as not requiring support services. This may place Latino families at an increased risk of experiencing burden, particularly because these families already struggle to access services due to issues such as lack of familiarity with the mental health system, low English proficiency, and societal stigma (López, 2002; Parra Cardona et al., 2012; Vega, Kolody, Aguilar-Gaxiola, & Catalano, 1999; Vega et al., 2007).

It is important to note that financial burden was the only type of family burden not associated with family hope for the future. Our sample came from the public mental health sector of an urban county and from a low-income community service area. Moreover, key Latino family members tend to have lower socioeconomic status, be younger, and have

fewer years of education, which contribute to the unique challenges they face in their caregiving role (Guarnaccia et al., 1992; Magaña et al., 2007). However, despite the probable financial strain experienced by families in this study, they did not report high levels of financial burden; instead, the family interaction burden subscale had the highest average burden score. Because of the value of family relationships in this cultural group, hope may prove more influential in decreasing burden associated with family interactions than financial stressors.

This study found that hope has a prominent presence and function for Latino family members caring for a loved one with a mental illness. Therefore, it is critical for practitioners working with Latino families to consider the role of hope in these family systems. Because family members are usually involved in the treatment process of their loved one, practitioners need to be mindful of encouraging, not dissuading, families from using this strength (Barrio & Dixon, 2012; Barrio, Hernández, & Barragán, 2011). Similarly, the inclusion of family resources such as hope can help refocus family treatment from a deficit to a strengths perspective (Barrio & Yamada, 2005; Bauer et al., 2012; Santisteban, Coatsworth, Briones, Kurtines, & Szapocznik, 2012). Interventions that address and promote the use of hope could be beneficial in helping these families manage their caregiving responsibilities. Specifically, family psychoeducation has been found to be effective in helping families cope with the illness (Lucksted, McFarlane, Downing, & Dixon, 2012). Learning about a family member's illness can increase the family's level of hope by providing information about the course of the illness. For instance, schizophrenia is generally more manageable with time, as evidenced by our findings that increased length of illness was correlated with decreased burden among key family members, possibly due to improved family adaptation (Zauszniewski et al., 2008).

This study had several limitations. The moderate sample size may have prevented the detection of significant effects due to low power. However, despite the sample size, we were able to detect a significant relationship between family hope and family burden. This suggests that additional studies examining hope among family members are needed (Schrunk, Bird, Rudnick, & Slade, 2012). In addition, we used cross-sectional data; longitudinal data may be better suited for examining the stress and coping process. Due to the cross-sectional nature of our data, we were not able to determine causation or direction for our variables (Tabachnick & Fidell, 2007). Although we examined hope as a predictor of burden, it is possible that burden predicts hope, which could suggest a bidirectional association (Friedman-Yakoobian et al., 2009).

Items in the burden measure focused on objective burden; therefore, further examination of other components of burden, such as subjective burden, is important. However, as pointed out by other researchers (Glanville & Dixon, 2005; Maurin & Boyd, 1990), there have been inconsistencies in the operationalization of objective and subjective components of burden, which further highlights the challenges presented when examining the multifaceted concept of burden (Awad & Voruganti, 2008). In addition, future studies may benefit from quantifying family contact with patients to examine if differences in intensity of contact affect burden among Latino family caregivers. This study required patients to identify a key family member with whom they had at minimum weekly contact for study participation.

Although the majority of patients lived with their family, we did not have information regarding the intensity of contact for the five (9%) patients who did not live with their key family member. Further research may also benefit from employing a mixed-method approach that could offer insight into culturally salient caregiving themes relevant to families caring for a loved one with mental illness.

Future studies may consider examining the effect of acculturation on hope and burden. Because our sample of family members generally had low acculturation, there was too little variability to examine the relationship between acculturation and hope. Moreover, because family participants in our sample were predominantly Spanish speaking and of Mexican origin, findings may not be generalizable to other Latino groups.

Altogether, study findings highlight the importance of examining protective factors as potential resources for Latinos and other underserved groups in mental health services research. This study adds to our knowledge of families and schizophrenia by offering insight into hope among Latino families experiencing burden. As such, our findings provide support for the acknowledgment and cultivation of family hope in treatment interventions and practice when working with families caring for a relative with a severe mental illness.

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TABLE 1
Correlations and Descriptive Statistics for Family Hope, Patient Duration of Illness, Symptoms, and Burden

	1	2	3	4	5	6	7	8	9
1. Family member hope	1								
2. Patient duration of illness	.008	1							
3. Patient symptoms (PANSS)	-.109	-.100	1						
4. Family burden total	-.437**	-.272*	.090	1					
5. Family financial burden	-.124	-.134	-.104	.637***	1				
6. Routine family activities	-.449**	-.290*	.161	.857***	.495***	1			
7. Family leisure	-.337*	-.232	.035	.860***	.432**	.622***	1		
8. Family interaction	-.433**	-.198	.111	.885***	.449**	.736***	.697***	1	
9. Effect on others' health	-.369*	-.235	.142	.723***	.203	.525***	.651***	.553***	1
<i>M</i>	4.13	12.78	2.17	.718	.611	.759	.759	.815	.624
<i>SD</i>	1.02	11.75	.746	.519	.544	.626	.642	.746	.685

PANSS = Positive and Negative Syndrome Scale; SD = standard deviation; family financial burden, routine family activities, family leisure, family interaction, and effect on physical/mental health of others are subscales of the Family Burden Interview Schedule; *N* sizes fluctuate due to missing values.

Two-tailed probability:

* $p < .05$;

** $p < .01$;

*** $p < .001$.

TABLE 2

Hierarchical Linear Regression Model Examining Relationship of Hope on Burden among Latino Family Members of Persons with Schizophrenia

	β	SE	<i>t</i>	<i>F</i> -test
Block 1				
Length of illness	-.269	.132	-2.04	$F = 4.17; df = 1, 52; p = .046$
Block 2				
Length of illness	-.265	.119	-2.24 [*]	$F = 9.11; df = 2, 51; p = .001$
Hope	-.415	.115	-3.62 ^{**}	

Standardized estimates; SE = standard error; two-tailed probability:

^{*}
 $p < .05$;

^{**}
 $p < .01$.