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# Support and Barriers to Help Seeking in Latina/o Migrant Workers

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UNIVERSITY OF MIAMI

SUPPORTS AND BARRIERS TO HELP SEEKING IN LATINA/O MIGRANT  
WORKERS

By

Rachel Becker

A DISSERTATION

Submitted to the Faculty  
of the University of Miami  
in partial fulfillment of the requirements for  
the degree of Doctor of Philosophy

Coral Gables, Florida

December 2013

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Supports and Barriers to

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Help Seeking in Latina/o Migrant Workers.

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This dissertation explored help seeking for mental health concerns in migrant workers using a community-based mixed-methods design. Specifically, the study asked two sets of questions; the first explored individual-level predictors of help seeking and the second focused on contextual-level factors related to mental health, well-being, and help seeking. Participants were 95 Latina/o migrant workers living in South Florida. A portion of these individuals participated in the qualitative phase. Hierarchical regression analyses were used to answer the first set of questions. Results indicated informal help seeking was predicted by gender, acculturation, coping strategy, depressive symptomology, and attitudes toward seeking professional help. Five themes emerged from directed content analysis of focus group and interview data. The current study found that migrant workers experience significant levels of depressive symptomology, which is consistent with the literature on the mental and physical health of migrant workers. A unique contribution is the moderator analysis, which found that the level of depressive symptomology moderated the effect of religious coping on help seeking. From the perspective of participants, the centrality of children appeared as a protective factor in their lives. The implications of these findings for practice, research, and policy are discussed.

## Acknowledgements

As with each color in a mosaic, this dissertation represents the efforts of many; I merely created the frame. I thank all of the participants who trusted women outside of their community to hear their voices and learn from their experiences, in the hope that in the future those in their community will be able to fully *mejorar sus vidas*. Thank you to Etiony, who helped me arrange all of the pieces into one coherent picture and use my privileges to give voice to this community. Rocio and Carlos – your support and love have left an indelible mark on my life. Your vivacity and passion for the communities in which your work inspires me. Your guidance and encouragement were omnipresent, lest I forget the safety net under me. Lina, Daniela, and Pilar – *un enorme gracias desde el fondo de mi corazón*. Your diligence, intelligence, and flexibility form the cornerstone of this work. Finally, to my friends, family, and partner: without knowing it, you fill in the remaining shards of color. You have supported my journey to growing my passions and myself, parts of which are reflected in this work.

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## Chapter 1: Introduction

Migrant farmworkers<sup>1</sup> are key contributors to the well-being of American families. The majority of produce we consume is sown by the hands of migrant workers, yet we continue to know little about them. Political discourse frequently portrays undocumented immigrants<sup>2</sup> as a monolithic group. The same is true in psychology; beyond Alderete and colleagues' (1999) seminal study exploring the immigrant paradox with one such group, Latina/o<sup>3</sup> migrant workers, little psychological research exists. Other fields, such as public health, medicine, and nursing have explored the strengths and needs of this group; however, few address the mental health of migrant workers. In this era of immigration reform and heightened fears of deportation, psychologists can provide a more comprehensive picture of migrant workers by examining individual- and group-level variables that impact well-being and access to healthcare services.

Migrant workers are individuals who leave their homes to seek employment in agricultural work, often in an attempt to escape poverty in their native countries (Migrant Clinicians Network, 2013). A socio-historical framework helps elucidate factors related to current migration patterns. In the 1940s, the United States and Mexico formed a bilateral agreement that resulted in the formation of the *Bracero* program. This program provided American agribusinesses with an influx of low-wage workers and enabled Mexicans to obtain temporary work visas. In 1964, the *Bracero* program ended when information about workers' rights violations, including physical mistreatment and withholding of payment, emerged (Kirschten, 1999).

Various structural and policy decisions have created an economy with a high demand for low-wage labor. The majority of Latina/o migrants cross the Arizona desert,

a journey often ridden with exploitation and mistreatment, to meet these labor needs (Rosenblum, 2012). Upon their arrival, migrants begin working in one of three streams: the Eastern stream, running from Florida to the New England States; the Midwestern stream, spanning Texas and winding through every Midwestern state; or the Western stream, which starts in southern California and terminates in Washington or branches northeast from central California to North Dakota (Apostolopoulos et al., 2006).

### **Mental and Physical Health**

Several studies document the impact of these working and living conditions on the mental and physical health of migrants. Migrant workers experience rates of musculoskeletal pain, infections, HIV, digestive diseases, vaccine-preventable illnesses, diabetes, hypertension, circulatory problems at levels significantly higher than the general population (Hansen & Donohoe, 2010; Kandula, Kersey, & Lurie, 2004; Mobed, Gold, & Schenker, 1992; S. Quandt, Clark, Rao, & Arcury, 2007). Studies examining the mental health of this population consistently find higher rates of depression and anxiety in migrant workers than in the general population (Alderete, Vega, Kolody, & Aguilar-Gaxiola, 1999; Familiar, Borges, Orozco, & Medina-Mora, 2011; Hiott, Grzywacz, Arcury, & Quandt, 2006; Hovey & Magaña, 2000; Hovey & Magaña, 2002a, 2002b, 2002c; Kiang, Grzywacz, Marín, Arcury, & Quandt, 2010). The same is true for research exploring the overall lifetime prevalence rate for having either a mood disorder (major depressive episode, manic episode, dysthymia); anxiety disorder (panic disorder, agoraphobia, social phobia, simple phobia); substance use disorder (alcohol abuse, alcohol dependence, drug abuse, drug dependence); psychosis; somatization disorder; or antisocial personality disorder (Alderete, Vega, Kolody, & Aguilar-Gaxiola, 2000;

Alegria et al., 2008; García, 2008; Hiott et al., 2006; Hovey & Magaña, 2003; Kiang et al., 2010; Salgado de Snyder, Cervantes, & Padilla, 1990; Worby & Organista, 2007).

### **Factors Associated with Mental and Physical Health**

Efforts have been made to identify correlates of mental and physical health among migrant workers. The Developmental Systems Theory (Ford & Lerner, 1992) guides the classification of these factors and acknowledges that no single or ideal developmental health trajectory exists; rather, the nature of interactions between the individual level factors of Latina/o migrant farmworkers and components of the diverse environments in which they live produce a variety of mental and physical health outcomes. Individual factors focus on demographic and personal elements, communal factors relate to cultural and community-level processes, and contextual factors refer to other elements of one's environment. For example, research has identified individual factors including age, and coping; communal factors such as perception of illness; and contextual factors such as migration and pesticides as important correlates of physical and mental health.

### **Help Seeking**

Only a fraction of migrant workers have access to health care – 5% to 11% have health insurance provided by their employers and an additional 7% to 11% have access to Medicaid or other government-provided health insurance (Bauer & Kantayya, 2010). Furthermore, only 13% of migrant workers receive medical, dental, or behavioral health care at migrant health centers (Villarejo, 2003). The recent Patient Portability and Affordable Care Act will play no role in addressing health disparities in migrant workers because it excludes undocumented immigrants from its provisions (Kelly et al., 2012). Additionally, fears of discovery of documentation status or losing their jobs, extreme

poverty, frequent migration, experiences of discrimination and limited English proficiency are barriers to physical healthcare utilization (e.g., Acury et al., 2012).

Research suggests that many older Mexican migrants have never sought medical treatment during their time in the United States because they feared deportation. Instead, many used traditional healing practices or distraction through alcohol use to alleviate their health concerns (de Oca, García, Sáenz, & Guillén, 2011). Several healthcare barriers have emerged from the research, including fear, discrimination, acculturative stress, cultural and linguistic difficulties, low educational attainment, frequent migration, poverty, and a limited number of health care centers (T. A. Arcury & Quandt, 2007; Chen & Vargas-Bustamante, 2011; Connor, Layne, & Thomisee, 2010; Kiang et al., 2010; Marín, Marín, Padilla, & de la Rocha, 1983; Yznaga, 2008). Additionally, migrant patients may receive potentially incompatible treatments from several providers (Bauer & Kantayya, 2010).

Given the challenges inherent in seeking formal, professional help for mental and physical health concerns, research suggests that migrant workers also engage in informal and indigenous seeking. Several studies indicate that migrant workers use indigenous or folk treatments, such as the services of traditional healers, herbs, and botanicals (e.g., Baer, 1996; Horton & Stewart, 2012). Additionally, studies suggest that migrant workers use social support networks to help them address various health concerns (e.g., Aranda et al., 2001; Padilla et al. 1988). Therefore, several potential help seeking patterns and avenues exist.

## **Present Study**

While previous research has identified factors related to Latina/o migrant workers' health and help seeking, most looked at these concepts in a fragmented manner. Furthermore, the relationship between these factors and the process of help seeking has remained relatively unexamined. The current study employed a community-based mixed-methods framework and the Developmental Systems Theory (Lerner & Ford, 1992) to explore the relationship between individual, communal, and contextual factors that influence help seeking in migrant workers. Specifically, the current study asked the following question. 1) What are the help seeking patterns of migrant workers? 2) How are acculturation, coping strategies, level of depressive symptomology and help seeking attitudes related? 3) Do acculturation, coping strategies, level of depressive symptomology, and help seeking attitudes predict help seeking behavior in migrant workers in South Florida? 4) What factors influence migrant workers' mental health and well-being? 5) How do these factors impact mental health and well-being? 6) Which elements enhanced and impeded participants' help seeking behaviors?

Using an Explanatory Sequential Mixed-Methods Design (Creswell & Plano Clark 2011), the study began with a quantitative phase and then was followed by a qualitative phase. Quantitative methodology and hierarchical linear regression were used to answer questions 1-3. Qualitative methodology and directed content analysis were used to answer questions 4-6. Taken together, these findings add to the development of a multi-level systems theory about supports and barriers to help seeking among migrant workers.

In the following sections, Chapter 2 presents a review of the literature and the Developmental Systems Theory, which serves as a foundation for the present study. Chapter 3 describes the dissertation's framework and design. Chapter 4 focuses on the results from the quantitative phase and Chapter 5 presents the qualitative findings. Finally, Chapter 6 discusses the study's implications for research, practice, and policy.

## Chapter 2: Literature Review

The current United States immigration patterns stem from various structural factors and policy decisions that shape labor market incentives for employers, native workers, and immigrants (Rosenblum, 2012). While the debate about immigration wages on, high numbers of Latina/o<sup>1</sup> migrants cross the border and fuel the United States' economy by providing necessary labor for low-wage service and production jobs (Worby & Organista, 2007). The Migrant Clinicians Network (2013) defines migrant workers as individuals who are required to be absent from a permanent place of residence for the purpose of seeking employment in agricultural work. On the other hand, seasonal farmworkers are employed in farm work but do not move from their permanent residence to work; seasonal workers may also have other sources of employment. Although one does not have to be from another country to be a migrant farm worker, this type of work typically attracts immigrants. Up to 85% of fruits and vegetables in the U.S. are cultivated and/or hand harvested by farmworkers, half of whom earn less than \$10,000 per year (Hansen & Donohoe, 2010), and migrant and seasonal farmworkers comprise almost half of this work force (Alderete et al., 2000). This occupation holds inherent risks; only mining exceeds the dangerousness of migrant farm labor (Perischino & Ibarra, 2011).

Migrant workers “enter a world that already places them in the stigmatized position of interlopers, parasitically feeding off a generous welfare state” although workers insist “*no soy welferero*” – “I’m not a welfare-type person” (Quesada, 2011 p. 387). This public discourse frequently overshadows the recognition that migrant workers comprise a marginalized group with poor health outcomes and limited access to resources

(Albarrán & Nyamathi, 2011). In the past three decades, an increasing number of studies have sought to delineate the mental and physical health of this population, as well as their personal, cultural, and contextual resources (Borges et al., 2009; Carol Cleaveland, 2010; Familiar et al., 2011; J. Grzywacz et al., 2010; J. G. Grzywacz, Arcury, et al., 2007). This section examines the literature around demographic characteristics, mental and physical health indicators, and risk and preventative factors of Latina/o migrant workers.

### **Background**

Latina/o workers migrate to the United States, largely driven by severe economic needs and a desire to make a better life. This complements the needs of U.S. industries that are shifting to a mixed legal and illegal foreign work force (Stodolska & Santos, 2006). For example, one study (Nandi et al. 2011) posits that during peak agricultural seasons each year, upward of 2,000 undocumented migrants cross the eastern Arizona border, although many are detained and repatriated and therefore unaccounted for in estimations. Their journeys to the U.S. is laden with opportunities for exploitation and mistreatment: many migrants pay smugglers up to \$3,000 to transport them across the border, others swim across the Rio Grande or endure perilous conditions traversing the desert. Latina/o migrant farmworkers and day laborers move in three distinct streams once they enter the United States. The Eastern stream spans from Florida to Ohio and New England States. The Midwestern stream begins in south Texas and winds through every Midwestern state. The Western stream starts in southern California and either hugs the coast up to Washington or branches northeast from central California to North Dakota (Apostolopoulos et al., 2006). The majority of migrants in the Western and Midwestern streams are from Mexico, while the Eastern stream is comprised of individuals from a

variety of Caribbean, Central American, and South American countries, as well as from Mexico. Within these streams, the majority of migrants engage in farm work, while others are employed in landscaping, construction, or meatpacking. Migrant farmworkers typically live in the southern half of the United States during the winter and migrate north before the planting and harvesting season commences (Hovey & Magaña, 2000).

Estimating the size and composition of this population is difficult, as many are undocumented immigrants who move to the United States from a variety of seasonal economic sectors and geographic regions. Recent figures suggest that of the five to six million migrant workers believed to be in the U.S., over 70% are undocumented, close to 95% are Latina/o, with Mexicans comprising 90% of the population (Acury et al. 2012). Additionally, approximately 90% are men, close to 55% are married, their mean age is 30, and they have a mean education level of sixth grade (Fitzgerald, 2001, 2004). Migrant farmworkers often live and work in substandard conditions on socially and geographically isolated farm encampments. Their housing is frequently comprised of barrack-style buildings with shared space for eating and bathing, such that pesticide-contaminated clothing may be washed in the same sink in which food is prepared. Many scholars have compared migrant workers to slaves indentured to labor contractors who not only control their paychecks, but also deduct funds for smuggling fees, rent, utilities, and food at inflated rates (Carol Cleaveland, 2010; Hansen & Donohoe, 2010; Holmes, 2011; Quesada, 2011; Villarejo, 2003).

The living conditions of migrant workers, coupled with the physical demands of their employment, threaten the mental and physical health of migrants. Occupational stressors include pesticide exposure, overexposure to sun and heat, and dangerous

machinery, among other things. Compared to the general population, migrant workers suffer increased rates of bacterial, viral, and parasitic infections, digestive diseases, vaccine-preventable illnesses, diabetes, hypertension, circulatory problems, and mental disorders. Unfortunately, migrant workers' fears of discovery of documentation status or losing their jobs (Acury et al., 2012), extreme poverty, and limited English proficiency often curtail their ability to access health services to address these concerns (Apostolopoulos et al., 2006).

The federal government created the Migrant Health Act in 1962 to address the health care needs, as well as living and working conditions, of migrant workers. Currently, 154 federally funded migrant health care centers serve migrant workers throughout the U.S., providing medical, dental, and behavioral health care. However, the Migrant Health Program serves only a fraction – 13 percent – of migrant workers (Villarejo, 2003), leaving the remaining workers in a vulnerable position. Only 30 percent of migrant workers have health insurance, which starkly contrasts with the 84% of U.S. residents with insurance. Although they live well below the poverty line, less than one-third of migrant women qualify for Medicaid because of their undocumented status (Kaffold et al., 2004). Therefore, migrant workers often postpone seeking medical treatment until they are seriously ill, leading to higher health care costs and poorer outcomes (Bauer & Kantayya, 2010). Various structural factors contribute to health disparities experienced by this group (Kelly et al., 2012), which will remain untouched by the Patient Portability and Affordable Care Act, as this law excludes undocumented immigrants from its provisions (Perischino & Ibarra, 2011). Furthermore, history suggests that current immigration reform proposals will fail to ameliorate root causes of

these disparities. Research indicates that after 1996 and the passing of the Immigration Reform and Control Act (which increased support for border enforcement and criminalized the hiring of unauthorized migrants), factors that had previously increased the chances of obtaining a skilled occupation (e.g., more education, higher levels of English proficiency, and higher levels of U.S. experience under a work visa) became insignificant predictors of obtaining skilled work, resulting in more acute health risk factors (Gentsch & Massey, 2011).

### **Theory**

The Developmental Systems Theory (Ford & Lerner, 1992) is used here to examine the state of the health of migrant workers. This theory provides a framework that acknowledges factors that have traditionally been the focus of psychology (e.g., individual characteristics), as well as those that have recently received increased attention (e.g., cultural and contextual characteristics). This theory postulates that no single or ideal developmental trajectory exists; rather, the nature of interactions between the individual and the diverse environments in which they live produce a variety of developmental paths. Accordingly, an examination of the literature on factors affecting the well-being of Latina/o migrant workers should include contextual factors, such as occupational stressors, social isolation, and discrimination, as well as individual characteristics. (Social context, for example, can prevent Latinos from accessing necessary services, such as in states where anti-immigration legislation deters immigrants from obtaining medical care.) Given the vulnerable and multi-stressed context of migrant workers, and the relatively low levels of mental, physical, and behavioral health concerns in the population, the literature should also address resilience factors and protective elements, such as access to

social support, which has been associated with lower levels of anxiety and depression among migrants (Hovey & Magaña, 2002b; Parra-Cardona, Bullock, Imig, Villarruel, & Gold, 2006).

### **Mental and Physical Health**

Mental and physical health comprise two salient facets of well-being (Prilleltensky & Prilleltensky, 2006). Researchers first began to examine the health of Latina/o migrant workers in earnest in the 1980s. Following the cornerstone study by Alderete and colleagues (1999), researchers increased their attention on this population's well-being, as the findings from this large-scale study suggested that the longer Mexican migrant workers resided in the United States, the poorer their mental health became. Researchers began examining the mental and physical health of immigrants, as well as potential correlates, to further elucidate this phenomenon (Burnam, Hough, Karno, & Escobar, 1987). An array of studies now provides a good foundation for the understanding of the well-being of Latina/o migrant workers. The following sections first delineate findings about the state of specific mental and physical health conditions to provide a more nuanced understanding of the state of migrant well-being. For ease of understanding, Table 1 highlights the physical and mental health factors that affect migrant workers.

### **Mental Health and Substance Use**

The existing literature about depression, anxiety, substance use, and other mental illnesses presents a complex picture of mental health disparities among migrant workers.

**Depression.** The majority of studies examining the mental health of Latina/o migrants have focused on depressive symptoms and disorders. While several earlier

studies (e.g., Vega et al., 1985; Cervantes & Castro, 1985) had established that depressive symptomology in Mexican Americans was related to stressful life events, social adaptation, and stress, little focus was given to the Mexican migrant population until the epidemiological study of Alderete and colleagues (1999). This study surveyed over 1,000 Mexican migrant women and men and explored psychosocial risk factors in addition to the prevalence of depressive symptomology. Alderete and colleagues found that 21.1% of men and 19.7% of women met “caseness” for depression, having a significant level of depressive symptomology and the need for mental health services (Radloff, 1977). This research was among the first of several studies to focus on the link between acculturation and depressive disorders, finding that higher levels of acculturation are associated with higher rates of depression. Additionally, stress due to discrimination was greater risk of depression. Throughout this article, acculturation will be conceptualized as a multidimensional process consisting of the convergence of heritage-cultural and receiving-cultural practices, values, and identifications (Schwartz, Unger, Zamboanga, & Szapocznik, 2010).

A subsequent study of the same size (Alderete et al., 2000) found that the prevalence of mood disorders in migrant workers was 7.2% for men and 6.7% for women. Further support was given to the immigrant health paradox whereby the longer that Mexican-born migrants resided in the United States, the poorer mental health outcomes they had. Subsequent explorations of stressors and depressive symptoms have varied in the percentage of individuals with elevated depressive symptoms – from approximately 30% (Hovey & Magaña, 2000; Hovey & Magaña, 2002a, 2002b, 2002c) to above 40%. (Hiott et al., 2006; Hiott, Grzywacz, Davis, Quandt, & Arcury, 2008).

Looking specifically at caseness, Kiang and colleagues (Kiang et al., 2010) found that approximately 29.3% of their sample of migrant workers met criteria, whereas Mejia and McCarthy (2010) found caseness as high as 63% in college students from Mexican migrant backgrounds; however, this latter study diverged from others in that it found no support for the immigrant health paradox when language preference was not held constant.

In an attempt to elucidate the health paradox and discrepant levels of caseness, one study compared risk for first onset of psychiatric disorder between comparison groups of migrants in the United States and nonmigrants in Mexico, finding that after their arrival to the United States, migrants had a significantly higher risk than did their nonmigrant family members in Mexico (prevalence of 17.4% versus 11.7%). These elevated risk levels were restricted to only the two youngest cohorts interviewed (those aged 18-25 or 26-35 years) (Breslau et al., 2011). The findings support the hypothesized adverse effect of migration from Mexico to the United States on the mental health of younger migrants. Another comparison group study revealed a similar prevalence of depressive symptoms (approximately 16%) for migrants when compared to relatives of migrants and non-relative nonmigrants in the general population (Familiar et al., 2011). Research into a more precise understanding of occupational stressors indicates that depressive symptoms generally followed a U-shaped distribution across the season (with higher levels of depressive symptoms at the start and end of the season), and this pattern may be related to some of the aforementioned stressors (J. Grzywacz et al., 2010).

**Anxiety.** In many ways, the examination of anxiety has paralleled that of depression, yet with less attention overall (Familiar et al., 2011). Prevalence rates of

anxiety across studies have varied widely, reaching as high as 44% (Lindert et al., 2008). Research comparing Mexican immigrants in the United States to Mexican Americans born in the U.S. has found that the immigrant health paradox holds true for anxiety as well (Alderete et al., 2000; Alegría et al., 2008; Borges et al., 2009; Hiott et al., 2006; Hiott et al., 2008), with the exception of one study failing to find differences in anxiety between Mexican American and Mexican farmworker college students when language preference was not held constant (Mejía & McCarthy, 2010). Several psychosocial indicators, many of which overlap with those correlated with depressive symptomology, have also been associated with anxiety symptomology as risk and protective factors (Alderete et al., 2000; Hovey & Magaña, 2000; Hovey & Magaña, 2002a, 2002b, 2002c).

In a recent examination of anxiety symptomology in Mexican migrant workers who had returned to Mexico from the United States, Familiar and colleagues (2011) found the overall prevalence of mild-moderate anxiety symptoms in the past week to be approximately 16%. The risk for these symptoms increased by almost 30% among individuals who had migrant experiences, as compared to their family members or Mexicans who had not migrated. The findings reported by Breslau et al. (2011) converge with those of Familiar et al.: Compared with nonmigrant family members of migrants in Mexico, Mexican migrants in the U.S. had a significantly higher lifetime prevalence of any anxiety disorder (10.1% versus 6.2%). Furthermore, migrants had a higher prevalence for every specific type of anxiety disorder assessed. A complex relationship between stress and health outcomes exists. Crain and colleagues (2012) found that normative daily stress was modestly associated with greater anxiety symptoms but

unassociated with depressive symptoms. However, greater stress specific to farm work was associated with caseness of both depression and anxiety.

**Substance use.** Early studies exploring substance use in Mexican migrant workers found differences in the consumption patterns of Mexican migrant workers, as compared with Mexican Americans. Specifically, one study found that drinking at dances, nightclubs, and lounges was less common among farm workers (Wilkinson, 1989). Literature on problem drinking within this population is scant. Focus has been paid to situational stressors (e.g., labor market exclusion, discrimination, and social isolation) that are highly associated with drinking (Finch, Catalano, Novaco, & Vega, 2003; Garcia, 2007; García, 2008; García & Gondolf, 2004), as well as indicators that overall consumption rates of Mexicans in the United States are higher than those of Mexicans in Mexico, such that Mexican American men suffer from cirrhosis of the liver at greater rates than the general population and have higher rates of alcohol-related violence and homicide (Alaniz, 2002).

Recent studies have sought to expand upon these findings and provide a clearer picture of incidence and prevalence rates; however, the results have been somewhat mixed. Some studies have indicated that rates of problem drinking within the Mexican migrant population may be as high as 37.6% (Hiott et al., 2008). In a comprehensive review of the literature on male migrant workers, Worby and Organista (2007) found that migrant men drink heavily when they do drink. Low alcohol usage was found for anywhere between 12% and 66% of migrant workers, as compared with 30% to 40% of the general U.S. population. On the high end of consumption, some studies have found up

to 17% of male Mexican migrant workers reported drinking five or more drinks every day in the past 30 days.

Worby and Organista's review (2007) indicated that research frequently supported the immigrant paradox for alcohol and substance problems. Meanwhile, in a series of studies with large, nationally-representative data sets, Borges and colleagues found no evidence that current Mexican immigrants in the U.S. have a higher risk for alcohol or alcohol use disorders than Mexicans living in Mexico. However, current Mexican immigrants were at a lower risk for drug use and drug disorders than U.S.-born Mexican Americans. For migrants, U.S. nativity, regardless of parent nativity, is the main factor associated with increasing use of alcohol and drugs (Borges et al., 2011; Borges et al., 2009; Borges, Medina-Mora, Breslau, & Aguilar-Gaxiola, 2007).

In one of the few studies on methamphetamine and cocaine use in Mexican migrant workers, the percentage of use in the past year was 21% overall, with higher rates for men compared to women in high-risk behavior venues. For men, methamphetamine/cocaine use was significantly associated with being younger than 35 years old, having multiple sex partners, depressive symptoms, alcohol use, sexually transmitted infections, and higher levels of acculturation (Hernández et al., 2009).

**Other mental illnesses.** A handful of studies have examined other mental illnesses present in Latina/o migrant workers (Alderete et al., 2000; Alegría et al., 2008; Hovey & Magaña, 2003; Kiang et al., 2010; Salgado de Snyder et al., 1990; Worby & Organista, 2007). These studies indicate that the overall lifetime prevalence rate for having one or more disorders, including mood disorders (major depressive episode, manic episode, dysthymia); anxiety disorders (panic disorder, agoraphobia, social phobia,

simple phobia); substance use disorders (alcohol abuse, alcohol dependence, drug abuse, drug dependence); psychosis; somatization disorders; or antisocial personality disorders for men is 26.7% ( $SE = 1.9$ ) and for women is 16.8% ( $SE = 1.7$ ). Additionally, high levels of acculturation and primarily residing in the U.S. increased the likelihood of having any disorder (Alderete et al., 2000). Furthermore, the immigrant paradox is supported by research comparing prevalence rates of a variety of disorders in migrants to their U.S.-born counterparts (Alegría et al., 2008).

### **Physical Health**

Compared with mental health data, a relatively larger body of literature exists for the examination of physical health in Latina/o migrant workers; however, national data regarding morbidity, mortality, and chronic health indicators is scant. One study notes the difficulty in obtaining this information is not only attributable to the lack of national focus, but also to the common pattern of migrants returning to their home countries to seek health care services (Villarejo, 2003). A variety of studies examine specific areas of health while others contain broad documentation of poor health outcomes experienced by migrant workers (Hansen & Donohoe, 2010; Kandula, Kersey, & Lurie, 2004; Mobed, Gold, & Schenker, 1992; S. Quandt, Clark, Rao, & Arcury, 2007). Therefore, the following sections describe extant research on infectious diseases and sexual behaviors, occupational injuries, chronic health conditions, and maternal and child health.

**Infectious diseases and sexual behaviors.** Migrant workers are susceptible to a variety of infectious diseases. Compared to the general population, they face higher prevalence rates of intestinal parasites, tuberculosis, and sexually transmitted diseases. In particular, HIV and AIDS (with a prevalence from less than 1% up to 5%) have been

identified as a major health concern for this population, given that a significant number of migrant workers may engage in some high-risk behaviors (Organista et al., 1998).

The health status of Mexican migrants in the United States is compromised by several HIV risk factors, including limited access to health services, multiple sexual partners, low rates of condom use, men having sex with men, drug use, and lay injection practices. These factors not only influence HIV prevalence rates in Mexican migrant workers, but also increases rates of potential sexually transmitted disease and HIV transmission (Apostolopoulos et al., 2006). Knowledge of HIV/AIDS transmission and proper condom use is problematic, with studies finding that frequency of condom use during the past year was no higher than half of the time (Magis-Rodríguez et al., 2009; Maxwell et al., 2006; K. C. Organista, Alvarado, Balblutin-Burnham, Worby, & Martinez, 2006; K. C. Organista & Kubo, 2005; K. C. Organista, Organista, Bola, de Alba G, & Morán, 2000; K. C. Organista, Organista, de Alba G, & Morán, 1996; K. C. Organista, Organista, García de Alba G, & Castillo Morín, 1997; P. B. Organista & Organista, 1997; P. B. Organista, Organista, & Soloff, 1998). The availability of drugs on the border and patterns of risky behaviors among migrants also indicates that drug users on the border are at risk of HIV/AIDS, and this risk is expected to increase with the spread of methamphetamine and crack cocaine. One study of Mexican migrant adults without stable housing found that 27% of men had sex with men, 28% were injectors of illegal drugs, and 21% were sex workers. However, those who engaged in the highest-risk behaviors, younger migrants, and residents of densely populated areas were more likely to use condoms consistently during sex (Denner, Organista, Dupree, & Thrush, 2005). These findings suggest the coexistence of a traditional cultural orientation that

does not support condom use and another one that does when the sex partner is formally employed as a sex worker (Caballero-Hoyos et al., 2008).

Several studies support findings that indicate risky sexual behaviors among Mexican migrant workers have significantly impacted their home communities in terms of diminished remittances and the introduction of HIV and other sexually transmitted infections (Duke & Carpinteiro, 2009). For example, rural women of Mexican birth remain at high risk for HIV/AIDS and data suggests that powerlessness to negotiate safe sex practices with their husbands is the highest risk factor for this population (de Snyder, Acevedo, Díaz-Pérez, & Saldivar-Garduño, 2000). Additional practices, such as returning to Mexico to receive lay injections for the treatment of various health maladies, increases the risk of HIV transmission (McVea, 1997).

**Occupational injuries.** The most common health problem cited in literature was occupation-related. Among the most serious occupational hazards faced by migrant workers is poisoning via pesticide exposure (Sakala, 1987). Exposure has resulted in a variety of skin disorders, ocular disorders, musculoskeletal pain, dermatitis, and respiratory illnesses (Kelly, 2012). The industrialization of farming, animal raising, and forestry has also been linked to lung disease in migrant workers (Villarejo, 2003). Given the nature of the heavy machinery and strenuous work conditions, migrant workers are at increased risk for injury and amputation of limbs, as well as chronic back pain (de Oca et al., 2011). Pain, sprains, dislocation, cuts, tears, and fractures were reported by more than one fourth of workers (T. A. Arcury & Quandt, 2007). A recent study indicates that forty percent of participants experienced elevated musculoskeletal discomfort (T. Arcury et al., 2012).

**Chronic health conditions.** Studies have drawn attention to chronic diseases that are prevalent in this population. The Migrant Clinicians Network (2012) notes that diabetes is the leading chronic health condition in patients who seek services at migrant and community health centers and diabetes management is poor (Weiler & Crist, 2009). In California, prevalence rates of obesity in Mexican migrant farm workers exceeded that of Mexican Americans, the general population, and Mexicans living in Mexico. Furthermore, high cholesterol serum has been found in Mexican migrant workers at rates that exceed comparison groups; however, in accordance with the immigrant paradox, these findings did not hold for recent immigrants from Mexico. (Villarejo, 2003).

Some evidence suggests that Mexican migrant workers' diets (e.g., nutritional content) sharply deteriorate within the first year of moving to the United States. Specifically, adult obesity, central body adiposity, elevated blood pressure, and blood lipid and glucose disturbances were common (Weigel, Armijos, Hall, Ramirez, & Orozco, 2007). Additionally, food insecurity is a growing concern among migrant workers and their families, with 34.7% of families reporting hunger and 82% reporting food insecurity (Borre, Ertle, & Graff, 2010). Food insecure households were more likely to have at least one member affected by symptoms of depression, *nervios* (a culturally-specific condition), learning disorders, and symptoms suggestive of gastrointestinal infection.

**Maternal and child health.** The Migrant Health Program, as well as other state and federal agencies, frequently provide health care for pregnant women and young children (Gaviria, Stern, & Schensul, 1982). While these programs provide pregnant women with increased access to doctors and medical clinics, national goals for prenatal

care, weight gain during pregnancy, and birth outcomes are not being met (Flocks et al., 2012). Studies also indicate that disparities exist in the health status of children, who face increased rates of under-immunization, Hepatitis A, iron deficiencies, and dental care (Villarejo, 2003).

### **Factors Influencing Mental and Physical Health**

Driven by a desire to improve the health outcomes and healthcare access of Latina/o migrant workers, as well as a growing body of literature suggesting that many health outcomes of Latina/o migrants may deteriorate after immigrating to the United States, several researchers have emphasized the need to examine health risk and protective factors (Worby & Organista, 2007). These factors frequently apply to both mental and physical health, although some are specific to certain aspects of health. Applying the Developmental Systems Theory (Ford & Lerner, 1992), no single or ideal developmental health trajectory exists; rather, the nature of interactions between the individual level factors of Latina/o migrant farmworkers and components of the diverse environments in which they live produce a variety of mental and physical health outcomes (as summarized in Table 2). This literature review has identified individual factors including age, and coping; communal factors such as perception of illness; and contextual factors such as migration and pesticides. Individual factors focus on demographic and personal elements, communal factors relate to cultural and community-level processes, and contextual factors refer to elements of one's environment.

#### **Individual Factors**

**Age.** The migrant and seasonal workforce is aging; more than half of these workers are older than 40 years old. Aging is associated not only with increased risk for

injuries and accidents, but also decreased help seeking behavior for physical health concerns (Weigel & Armijos, 2012). Being older leads to increased exposure to physically demanding labor and harsh environmental conditions and age is also positively associated with musculoskeletal discomfort, working while injured, and depressive symptoms (T. Arcury et al., 2012)

**Acculturation.** Acculturation has been linked to several facets of the “immigrant health paradox,” whereby Latina/os who have spent more time in the receiving culture report poorer mental and physical health outcomes (Schwartz & Zamboanga, 2008). Several studies have found that higher levels of acculturation are significantly positively related to poorer mental and physical health outcomes in Latina/o migrant workers (Caplan, 2007; C. Cleaveland, 2010; A. Nandi, Galea, S., Lopez, G., Nandi, V., Strongarone, S., & Ompad, D.C., 2011). Furthermore, health outcomes have been found to vary by nativity and acculturation after controlling for socioeconomic, cultural, and personal characteristics. While physical health status differed by nativity (thus supporting the “immigrant paradox”), some studies have found that nativity-based differences in mental health were explained by socioeconomic and personal characteristics (Franzini & Fernandez-Esquer, 2004). Other studies, which have focused on a greater variety of facets of acculturation and health outcome measures, have found less robust support for the “immigrant paradox” (Rubalcava, Teruel, Thomas, & Goldman, 2008).

Acculturation may also have an indirect influence on health outcomes. Acculturative stress decreases with increased markers of acculturation, such as increased English proficiency (Lueck & Wilson, 2011). Farmworkers with heightened levels of acculturative stress – associated with maladaptive coping behaviors (Shehadeh et al.,

2012), family dysfunction, ineffective social support, low self-esteem, lack of choice in the decision to immigrate and live a migrant farmworker lifestyle, high education levels, and low levels of religiosity – reported high levels of anxiety and depression (Hovey & Magaña, 2000). Moreover, the increased prevalence of mental and physical health disorders in adult migrants who return to Mexico suggests the impact of acculturation and acculturative stress may have a lingering effect on health (Ullmann, Goldman, & Massey, 2011; Velasco Ortiz, 1993; Weinreich, 2009).

**Coping.** Research regarding coping mechanisms of Mexicans and Mexican Americans suggests that they frequently use positive reframing, denial, and religion. Mexican citizens are less likely to use substance abuse and self-distraction as stress-coping strategies, and active coping in this population has a more positive effect on health outcomes than avoidant coping (Crockett et al., 2007; Espinosa & Menotti, 2009; Padilla, Cervantes, Maldonado, & Garcia, 1988; Puente-Díaz & Anshel, 2005; Weiser, Endler, & Parker, 1991; Yabiku & Farone, 2007). Research on the prevalence of health symptoms and disorders has indicated that Latina/o migrant workers may employ similar coping mechanisms. For example, utilization of a social support network (e.g., family, friends, or religious leaders) has been found effective as a coping response for seeking and obtaining employment, locating a place to live, and overcoming language difficulties (Padilla et al., 1988). Aranda and colleagues examined gender differences in stress and coping in Mexican Americans (Aranda, Castaneda, Lee, & Sobel, 2001), finding that women used family and marital domains as significant sources of social support, although they were also a source of stress. For men, stress came mainly from work and

support mainly from relatives outside of house. Therefore, although it may also cause stress, the use of social support constitutes one form of help seeking.

Several culturally specific coping mechanisms have surfaced in the literature. Cultural values such as *personalismo* (personalism) and *familismo* (familism) have been found to be the basis of Mexican migrants' spiritual perspective and the engagement of these values may represent the basis of religious coping (Campesino & Schwartz, 2006). A recent study has also indicated preliminary support for two coping mechanisms used by Latina/o migrant workers: individual mobility and social creativity (Shinnar, 2008). Finally, personal coping resources are a significant predictor of better self-reported health, and social coping resources have trended toward significance. While this begins to elucidate the influence of coping on health, neither personal nor social resources have been found to mediate or moderate the relationship between functional impairments and perceived health (Yabiku & Farone, 2007).

### **Communal Factors**

**Perceptions of illness and health beliefs.** Studies have suggested that perceptions of illness and health beliefs may impact the perception of stressors (e.g., pesticide exposure) and subsequent interpretation of illness (e.g., the Latina/o folk illness *susto*) and help seeking patterns (e.g., folk remedies) (Baer, 1996; Baer & Penzell, 1993). These perceptions can be impacted by acculturation, such that more acculturated migrants have a reduced number and type of omen beliefs.

Significant gender differences have been found in perceptions of treatment. Men tend to overestimate the efficacy of treatment options, while women hold a more restrictive view of the abilities of folk healers and focus on dietary changes to treat many

illnesses (e.g., Horton & Stewart, 2012). These variations may reflect different social roles. Because women have greater experience with illnesses and interactions with biomedical services, they may be more likely to accept biomedical providers' model of treatment (Maupin, Ross, & Timura, 2011). Even when migrant farmworkers' explanatory models are similar to the American biomedical model, studies have uncovered misconceptions about vaccinations that may impact preventative care (Vaughan, 1993) or treatment (J. E. Poss, 1998).

**Indigenous practices.** Given that the cultural conceptualization of health and illness in Latina/o migrant workers differs from that of the biomedical model, it follows that migrants frequently seek services beyond typical American healthcare. Latina/o migrants have been found to access the services of *curanderos*, or traditional healers (Tafur, Crowe, & Torres, 2009). Traditional healing practices among Mexican and Mexican Americans may be as high as 50 to 70% in some parts of the United States, and various studies have found moderate to high levels of effectiveness for a variety of mental and physical health problems (Alegria, Guerra, Martinez, & Meyer, 1977; Arenas, Cross, & Willard, 1980; Gafner & Duckett, 1992; Gillin, 1956; Glass-Coffin, 1991; Hoogasian & Lijtmaer, 2010; Joralemon, 1986; Krassner, 1986; Kreisman, 1975; Lawrence, Bozzetti, & Kane, 1976; Ortiz & Torres, 2007; Pylypa, 2001; Ross, Maupin, & Timura, 2011; Tafur et al., 2009; Waldstein, 2010; Weclaw, 1975; Zacharias, 2006). Additionally, research indicates that the majority of migrant workers used herbal remedies or other natural products, which they perceived to be more effective than pharmaceuticals. Migrants engaged in this practice out of the tradition they had learned from a relative, primarily from their mother (e.g., Baer, 1996; Horton & Stewart, 2012).

The majority who used herbal remedies believed them to be very helpful in treating specific illnesses and did not report any adverse reactions to any herbal remedy (J. Poss, Pierce, & Prieto, 2005). A recent study found that, although they were aware of the risks of self-medication, most participants self-medicated for pragmatic reasons: To refrain from missing work, lower cost of treatment, lack of health insurance, and mistrust of local health care system (Horton & Stewart, 2012).

### **Contextual Factors**

**Migration process.** Migration and factors directly associated with this process have been found to negatively impact migrant workers. For example, social conditions associated with migration, changes in behavior, adjustment of gender roles, family stability, and ethnic discrimination have been associated with increased risk for psychiatric disorders (Salgado de Snyder, 1993). Some specific psychological outcomes, including anxiety, depression, substance abuse, and general emotional and family instability, have been linked to both migration and threats of deportation for oneself or a family member (Cervantes, Mejía, & Guerrero Mena, 2010).

Migrant farmworkers also experience significant levels of stress prior migration (Clingerman & Brown, 2012). One possible explanation of this finding is family ambivalence. Family ambivalence regarding the decision to migrate is common and associated with anxiety symptoms (but not depression or alcohol dependence), especially among men who were unable to contact their families regularly (J. Grzywacz et al., 2006). Additionally, loneliness, a byproduct of migration, has been identified as a dominant element in workers' migration experiences and increases negative health

behaviors, such as risky sexual behaviors among Mexican male migrant workers (Muñoz-Laboy, Hirsch, & Quispe-Lazaro, 2009).

**Pesticides.** As previously discussed, pesticide use leads to many occupational health problems, yet contextual research shows how complicated the issue is. Farmworkers who lack control over daily work tasks may be at higher risk for pesticide exposure when they are subjected to heavy physical demands or other hazardous conditions (J. G. Grzywacz et al., 2010). A study exploring infant mortality and pesticide exposure found that women were frequently aware of basic safety procedures they could take to protect themselves against pesticides, but various barriers (e.g., fear of being fired) prohibited them from enacting these precautions (Flocks, Kelly, Economos, & McCauley, 2012). Relatedly, migrant workers who feel more economically vulnerable utilize scientific evidence less when judging the risks presented by environmental chemicals, thus increasing the health risks of pesticide exposure (Vaughan & Dunton, 2007). Studies have revealed that migrant workers living in more limited economic circumstances judged future health effects of pesticide to be more likely than those who were less economically stressed. They believed that safety precautions were less effective and that socioeconomic circumstances modified the relationship between intra-individual factors and response to risk (Vaughan, 1995).

**Living conditions.** The living conditions of migrant camps located on farms not only expose migrant workers to stressors that can directly decrease their health, but they also hold indirect risks. For example, living in labor camps and overcrowded apartments, and the absence of kin and community has been associated with increased substance use (Garcia, 2007; García, 2008) and depressive symptoms (J. Grzywacz et al., 2010). These

living conditions, which are situated within structural social disorganization (e.g., systems of oppression), external social disorganization (e.g., broken windows), and lack of collective efficacy, has also been associated with increased risky sexual behavior (Parrado & Flippen, 2010).

**Discrimination and structural barriers.** The social environment for migrant workers, laden with restrictive immigration legislation, fear of deportation, and discrimination, is associated with increased acculturative stress beyond what is accounted for by immigration-related challenges such as family separation and language difficulties (Arbona et al., 2010). Migrant workers frequently describe these stressors arising at the inception of their journeys to the U.S. (S. Chávez, 2011) and are maintained in their manifestations as social inequalities and health disparities (Holmes, 2011). Furthermore, recent examinations of wage and occupational returns indicate that the labor-market status of legal immigrants has deteriorated significantly (Gentsch & Massey, 2011). A concurrent increase in human trafficking of migrant workers has been observed (Hager, 2010).

These structural barriers may lead to distrust for and suspicion of others as well as great fear and anxiety; therefore, in order to diagnose and treat disorders in migrant workers, researchers have recommended that health care providers understand the exploitive social setting of migrant farm work and the adaptations of workers to that setting (M. L. Chávez, Wampler, & Burkhart, 2006; Harper, Babigian, Parris, & Mills, 1979). Coupled with this distrust is also a desire to counteract the perception of illegal immigrants as criminals (Parrado & Flippen, 2010; S. A. Quandt, Arcury, Austin, & Cabrera, 2001). Workers' perceptions of whether they are socially accepted by others

influences their behaviors, such as the decision to seek health care. Sanctuary cities, or municipalities with practices in place to protect undocumented immigrants, attempt to counter this hostile climate by providing a safe, inclusive society for undocumented workers. However, such cities are challenged by the federal government's assertion that cities lack the authority to establish immigration policies and that communities must comply with the federal "Secure Communities" program (in which fingerprint information is taken from jails and sent directly to immigration authorities) in order to receive certain federal funds (Quesada, 2011).

Finally, research demonstrates a relationship between occupational and health stressors. These factors include being away from family and friends, rigid work demands, unpredictable availability of work and housing, poor housing standards, low family income, educational barriers, hard physical labor, lack of transportation, exploitation by employer, lack of daycare, geographical isolation, limited access to medical care, undocumented status, acculturating to new environments, worries about socialization of children, paperwork for social services, marital status, and pace of work (J. G. Grzywacz, Arcury, et al., 2007; C. G. Magaña & Hovey, 2003; Parra-Cardona et al., 2006). Safety also lies at the intersection of occupational and health stress.

The extant literature primarily focuses on risk factors; however, 50-75% of farmworkers manifest no mental health problems, despite confronting substantial stressors. "Prevalence studies of poor mental health are important, but they provide little guidance for protecting or improving farmworker mental health" (Crain et al., p. 278). Although research findings delineate the vulnerabilities of this population, a wealth of

unearthed resilience factors also exists. For example, research suggests that self-efficacy protects farmworkers from elevated anxiety symptoms (Crain et al., 2012).

### **Access to and Utilization of Health Care**

The limited evidence demonstrates that only a small number of migrant workers have access to health care. Among hired farm workers, 5% to 11% have health insurance provided by their employers, and only an additional 7% to 11% have access to Medicaid or other government-provided health insurance (Bauer & Kantayya, 2010). Therefore, migrant workers generally access health care only when absolutely necessary: Studies have found that approximately one third of male farm workers never visited a medical clinic or doctor (Weigel & Armijos, 2012), and two thirds of migrant workers never had an eye care visit (Villarejo, 2003). Findings from research with older Mexican migrants has found that some had never received medical treatment during the course of their time in the United States for fear of being deported and that many used traditional practices or distraction through alcohol use (de Oca et al., 2011). Given the low rates of insurance and income, one fifth of farm workers traveled to Mexico to seek medical care, where they do not face language and cultural barriers, and can receive injections of vitamins and antibiotics are superior to available conventional medical care in the United States (Villarejo, 2003).

Across several studies, fear, discrimination, acculturative stress, cultural and linguistic difficulties, low educational attainment, frequent migration, poverty, and a limited number of health care centers have been cited as barriers to accessing and receiving health care (T. A. Arcury & Quandt, 2007; Chen & Vargas-Bustamante, 2011; Connor et al., 2010; Kiang et al., 2010; Marín et al., 1983; Yznaga, 2008). Further

complicating help seeking is the influence of migration itself; many migrant patients receive potentially incompatible treatments from several providers (Bauer & Kantayya, 2010). For example, many Mexican migrant workers receive care in Mexico as well as the United States, often seeking services in Mexico first because of the lower service cost, greater ease of scheduling an appointment, and an enhanced understanding of their cultural needs (Weigel & Armijos, 2012). However, Lopez-Cevallos and colleagues (2013) found that fear of deportation did not affect the use of medical and dental care for participants who sought services at mobile clinic located at their established church.

Several studies have explored how Latina/o migrant workers decide to seek professional care for occupational injuries and general mental and physical health concerns. The predominant approach to treating occupational injuries appears to be self-care with over-the-counter remedies and was frequently appropriate, with the exception of chemical exposure whereby the use of alternative medicine or herbal remedies is low (Anthony, Martin, Avery, & Williams, 2010). Findings from the early 1980s indicate that one third of migrant workers perceived their health as poor. Of the 57% of migrants who had received medical care in past year, 21% sought care for general physical, orthopedic and muscular-skeletal problems, minor illnesses or infections. Women were more likely to seek services than men, and those under 30 years old were more likely to seek preventative care (D. Slesinger & Cautley, 1981). Furthermore, specific patterns of utilization depended mainly on structural conditions, such as geographic location and availability of folk or clinical medical services, as well as on the nature of the illness and depend secondarily on sex, age, income, and educational level (D. P. Slesinger & Richards, 1981). Recent studies indicate little has changed. One recent study found that

living in a residence with fewer other adults, linguistic acculturation, higher levels of formal income, higher levels of social support, and poor health were associated with health insurance coverage. Access to a regular health provider was associated with being female, having fewer children, arriving in the United States prior to 1997, higher levels of formal income, health insurance coverage, greater social support, and not reporting. Finally, higher levels of education and formal income, coupled with poor health, were associated with utilization of emergency department care services (A. Nandi et al., 2008). Several of these stressors are also associated with health insurance coverage, which in turn, is closely tied to service utilization.

Perceptions of health care systems differ between migrant workers, depending on various demographic factors (e.g., age, degree of acculturation) and may influence choices regarding the type of care sought (Bauer & Kantayya, 2010). Research has also suggested that certain health promoting aspects of Latina/o cultures, such as knowledge of traditional medicine, are lost as migrants adapt to and adopt American ways of life. Therefore, maintenance of a Latina/o identity may help to maintain traditional medical, while bolstering the social networks that link Mexicans to each other and to their homeland help minimize threats to health. These findings suggest a more complex picture of health care utilization, such that increased access to professional medical care may not improve the health of migrants if it is accompanied by the loss of traditional medical knowledge (Waldstein, 2008).

A multitude of barriers often prevent migrant workers from seeking formal, professional help for mental and physical health concerns. Additionally, seeking formal help many conflict with cultural beliefs tied to the perception of health and illness, as

previously reviewed. Additionally, research regarding individual and communal-level factors of health suggests that migrant workers engage in informal and indigenous seeking. Several studies indicate that migrant workers use indigenous or folk treatments, such as the services of traditional healers, herbs, and botanicals (e.g., Baer, 1996; Horton & Stewart, 2012). Additionally, studies suggest that migrant workers use social support networks such as family and religious leaders to help them address various health concerns (e.g., Aranda et al., 2001; Padilla et al. 1988). Therefore, several potential help seeking patterns exist.

### **A Closer Look at the Research**

The results yielded by this literature review provide information not only regarding the health and care of Latina/o migrant workers, but also the scope and quality of the extant literature. Regarding the scope of focus, more articles focus on physical health than mental health. Relatively few have examined the access to services, treatment seeking behaviors, and utilization of services. More of the health care literature examines folk or indigenous practices, as opposed to traditional biomedical services. This may in part be due to the lack of a psychometrically sound measure for Latina/o help seeking behavior, which poses challenges in quantifying and categorizing professional health care use. Most of the literature regarding factors related to health outcomes focuses on acculturation and acculturative stress, followed by structural stressors. Little focus has been given to other individual or contextual factors. Additionally, much of the research has taken place with migrants in California or North Carolina; little research has looked at health outcomes in migrants in the Midwestern stream or at the southernmost or northernmost ends of the Eastern stream.

Research from the late 1990s to the present day tends to consist of large sample sizes (i.e., 200 participants or greater), use measures that are validated for the Latino population and possess adequate psychometric properties, and examines the relationship between multiple predictors and indicators. Given that this period of time is marked by an increased interest in studies with Latina/o migrant workers, the majority of our knowledge about this population is based on rigorous science. However, the examination of health outcomes, health care use, and related factors remains in its infancy. Few comprehensive literature reviews exist for any of these categories, and no meta-analyses were found. Additionally, few studies used a multi-modal or multi-method approach.

### Chapter 3: Community-Based Mixed-Methods Framework and Exploratory Sequential Mixed-Methods Design

#### Design

A community-based mixed-methods research (CBMMR) framework was employed, allowing for the integration of several forms of data and community-based research approaches (Badiee et al., 2011). This framework consists of five phases: 1) the *connecting stage*, where the researcher builds a relationship with the community; 2) the *diagnosing stage*, where the researcher explores the community's concerns; 3) the *prescribing and implementing stages*, where the research design is planned, finalized, and then the research itself becomes the goal; 4) the *evaluating stage*, where the impact of the research or intervention on the community is assessed; and 5) the *disseminating stage*, where the findings are shared with the community and other stakeholders. This study will report on the first three stages.

Using an Explanatory Sequential Mixed-Methods Design (Creswell & Plano Clark 2011), quantitative methods were used first, then followed by qualitative methodology. The data from the first phase will allow comparison to other studies examining the constructs of acculturation, coping, conceptualization of mental health, and psychopathology on help seeking behaviors in migrant workers in other parts of the country. These data will be examined to better understand how the experiences of South Florida Latina/o migrant workers are similar to or disparate from that of migrant workers in other locations in the United States.

The data from the second phase allows for a deeper understanding of the relationship between acculturation, coping, conceptualization of health and well-being, as well as their influence on help seeking behaviors in Latina/o migrant workers in South

Florida. This data will be used to extend the understanding of help seeking behaviors in Latina/o migrant workers by enabling the participants to explore factors other than those examined in the quantitative phase, as well as to share their understanding of the potential moderators and mediators of help seeking behaviors.

### **Participants**

Participants included 95 South Florida Latina/o migrant farmworkers and/or their partners. Inclusion criteria also required participants to be at least 18 years old. A subgroup of these individuals was selected to participate in the qualitative phase of the study. Additional information about these participants is presented in Chapters 4 and 5.

### **Setting**

The Everglades Community Association (ECA) consists of a 108-acre development called Everglades Farmworker Villages, financed through the U.S. Department of Agriculture (USDA) Farm Labor Program. This planned community consists of 436 single-family detached houses and townhouses subsidized for rent to farmworker families, two child-development centers, a neighborhood health center, recreational spaces, and retail services. The Redlands is a similar migrant community located within the same South Florida community. However, it consists of approximately 250 single-family detached houses and offers fewer community amenities than ECA.

Members of these communities are eligible to receive services from EnFAMiLIA, a leading social service agency in the Homestead/Florida City area. EnFAMiLIA's services target a variety of needs such as educational attainment and parenting. Given their focus, EnFAMiLIA agreed to collaborate on this dissertation initiative. Guided by the CBMMR framework, the principle investigator worked closely with EnFAMiLIA

prior to and during the study to connect with the community, explore the community's concerns, and finalize a research design with community input. Given the different aims and approaches of each phase, the specific methods, results, and conclusions of each phase will be presented separately.

### **Analysis Plan**

Using the community-based mixed-methods framework and the Developmental Systems Theory (Lerner & Ford, 1992), this study explored the relationship between individual, communal, and contextual factors that influence help seeking in migrant workers. Specifically, the research examined the following questions. 1) What are the help seeking patterns of migrant workers? 2) How are acculturation, coping strategies, level of depressive symptomology and help seeking attitudes related? 3) Do acculturation, coping strategies, level of depressive symptomology, and help seeking attitudes predict help seeking behavior in migrant workers in South Florida? 4) What factors influence migrant workers' mental health and well-being? 5) How do these factors impact mental health and well-being? 6) Which elements enhanced and impeded participants' help seeking behaviors?

Following the Explanatory Sequential Mixed-Methods Design (Creswell & Plano Clark 2011), the study began with a quantitative phase and then was followed by a qualitative phase. Quantitative methodology and hierarchical linear regression were used to answer questions 1-3 and is presented in Chapter 4. Qualitative methodology and directed content analysis were used to answer questions 4-6 and is presented in Chapter 5.

## Chapter 4: Quantitative Phase

### Quantitative Introduction

#### *Examining Mental Health Help Seeking in South Florida Latina/o Migrant Workers*

As previously indicated, this chapter focuses on the quantitative phase of inquiry and the next chapter will address the qualitative phase. Applying the Developmental Systems Theory (Ford & Lerner, 1992), several individual-level factors previously identified by the literature were the focus of the quantitative phase of inquiry. The purpose of this survey portion of the study was to explore help seeking patterns and the type of help utilized for mental health problems. Additionally, it sought to test the hypothesis that acculturation, coping strategies, level of depressive symptomology and help seeking attitudes are related. Finally, it examined the hypothesis that acculturation, coping strategies, level of depressive symptomology and help seeking attitudes predicted help seeking behavior in migrant workers in South Florida.

### Quantitative Methods

#### Variables

Depressive symptomology, acculturation, coping, treatment seeking attitudes, and help seeking behaviors are variables of interest in this study. Previous research has suggested that these factors are correlates of mental health in Latina/o migrant farm workers and their families; however the links between these variables is unclear. For the purposes of this study, *Latina/o migrant farm workers* will be defined as individuals who self identify as a migrant farm worker or their spouses and are of Latino origin.

*Depressive symptom*, as measured by the Center for Epidemiological Studies Depression Scale (CES-D) – Spanish Version (Radloff, 1977) is defined as cognitive,

affective, motivational, and somatic symptoms of depression as defined by the *Diagnostic and Statistical Manual–IV-TR*. *Coping strategies*, as measure by the Brief COPE-Spanish version (Carver, 1997), refers to problem-focused coping responses and responses directed to aspects of the situation other than the stressor. *Help seeking attitudes* are measured using the Attitudes Toward Seeking Professional Psychological Help Scale (ATSPPHS; E. H. Fischer & Turner, 1970) and refers to an individual's attitude toward seeking professional counseling for psychological disturbances. *Acculturation* refers to the extent to which individuals affiliate and identify with the Anglo Orientation scale and *enculturation* refers to extent to which individuals affiliate and identify with the Mexican Orientation scale. This is measured using the Acculturation Rating Scale for Mexican Americans-II (Cuellar et al., 1995). *Help seeking behaviors* refer to any indigenous/folk or professional services sought to meet health care needs.

### **Participants**

Study inclusion criteria required participants to be over the age of eighteen, a migrant or spouse/partner of a migrant in South Florida, and identify as of Latino origin. The study used a convenience sample, with participants recruited through word of mouth at EnFAMILIA and the Everglades Community Association. Based on a power analysis, in which there is 80% chance of detecting a small effect size of 0.15 as significant at the alpha of .05, 100 participants were recruited to complete the study and 95 completed all measures. An effect size of 0.15 was used because the explanatory ability of psychological research is generally small (Keith, 2006). Of the participants who did not

complete measures, all only completed the demographic form then noted that they did not have enough time to dedicate to the completion of the measures.

Table 3 presents the characteristics of the quantitative participants<sup>4</sup>. The average age of participants was 35.33 years ( $SD = 9.98$ ). Most participants were female (77%), married or cohabitating (74%), and had children (75%). Four percent of participants had no formal education, twenty-three percent of participants completed some or all of primary school education, thirty three percent completed some or all of secondary school, and thirty-one percent completed a technical degree or an associate's degree. The majority of participants earned either less than \$500 per month (22%) or between \$500 and \$999 per month (56%). Participants of Mexican origin made up the largest portion of the sample (64%); the remaining participants were from Guatemala (20%), El Salvador (14%), Cuba (1%), or Peru (1%). The majority of participants preferred to speak Spanish (75%); the remaining preferred to speak English (15%), both English and Spanish equally (6%), or an indigenous language (4%). Seventy-six percent of participants indicated that they understood, spoke, and read English "not too well" or "not at all." Most participants were Catholic (58%) or Christian (35%) and believed that religion influenced their lives "a lot" (68%). Although most participants attended church more than once a week (16%) or weekly (38%), the majority of participants considered themselves either a little religious (53%) or not religious (12%). Most participants said their primary reason for migrating was for a better future (39%) or work (25%).

### **Instruments**

**Demographic information.** A *Participant Demographic Form*, developed by the study facilitator and translated into Spanish and back-translated into English by IRB-

approved translators, was used to collect basic demographic information. This form included items such as the participant's age, gender, place and date of birth, country of origin, languages spoken, ethnic identity, members of the household, financial resources, educational level and attainment, number of times s/he has migrated to the U.S., location of previous residences in the United States, and reasons/events that lead to participant's (or partner's) the decision to migrate. As with all measures, participants chose the form in their preferred language.

**Help seeking attitudes.** The Attitudes Toward Seeking Professional Psychological Help Scale (ATSPPHS; E. H. Fischer & Turner, 1970) is a 29-item self-report measure reflecting an individual's attitude toward seeking professional counseling for psychological disturbances, as well as identifying some of the attitudes and personality variables relevant to help seeking. Each item is a statement that is scored on a 4-point Likert scale ranging from 0 (strongly disagree) to 3 (strongly agree). The individual subscales and content included Need (eight items; e.g., "A person with a strong character can get over mental conflicts by himself, and would have little need of a psychiatrist"), Stigma (five items; e.g., "Having been mentally ill carries with it a burden of shame"), Openness (seven items; e.g., "I resent a person— professionally trained or not—who wants to know about my personal difficulties"), and Confidence (nine items; e.g., "If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I could find relief in psychotherapy"). High scores indicate negative attitudes toward help seeking. E. H. Fischer and Turner (1970) reported reliability coefficients ranging from .62 to .74, with test-retest reliability coefficients ranging from .73 to .89. According E. H. Fischer and Turner, the four factors of the ATSPPHS should

be interpreted as a full-scale score because of the modest internal reliability coefficients of the subscales; therefore, the full-scale score was used for this study. Lopez-Arias (2006) developed a Spanish version of the ATSPPHS form. Reliability indices for the subscales and full scale were very strong (.83 or higher) and similar to those reported in studies that developed the original measure (Lopez-Arias, 2006). For this and the subsequent measures, the current study's internal consistency is reported in the preliminary analyses section.

**Acculturation/enculturation.** The Acculturation Rating Scale for Mexican Americans-II (ARSMA-II) (Cuellar et al., 1995) consists of 30 items that were originally divided in two axes: 13 items for the Anglo Orientation Scale (AOS, measuring acculturation) and 17 items for the Mexican Orientation Scale (MOS, tapping enculturation). The ARSMA-II has a response scale that ranges from 1 (not at all) to 5 (extremely often or almost always). The English language use dimension consists of 8 items (i.e., "I speak English"; "I enjoy listening to English language music"). The Anglo affiliation/ identification dimension consists of 3 items (i.e., "I associate with Anglos"; "My friends now are of Anglo origin"). The Spanish language use dimension consists of 9 items (i.e., "I speak Spanish"; "I enjoy listening to Spanish language music"). Finally, Mexican affiliation/identification dimension consists of 3 items (i.e., "I associate with Mexicans or Mexican Americans"; "My friends now are of Mexican origin"). A variety of studies have demonstrate adequate reliability (ranging from .77 to .88) and validity for this measure and suggest it is one of the most appropriate acculturation scale for use with not only Mexicans and Mexican Americans (Cabassa, 2003; Caplan, 2007; Cuellar, Arnold, & Maldonado, 1995; J. R. Magaña, de la Rocha,

Amsel, & Magaña, 1996), but also with diverse Latino groups (e.g., Gutierrez et al., 2009).

**Coping strategies.** The Spanish version of the Brief COPE (Carver, 1997) was used to assess a variety of coping strategies. This measure is an abbreviated inventory of coping responses. The Brief COPE consists of two items per scale, with a total of 14 scales. Participants are asked to bring to mind the most serious stressor they have experienced in the past year and indicate how they responded to it. Responses options range from 0 (*I didn't do this at all*) to 3 (*I did this a lot*). The reliability of the Spanish version has been found within the acceptable range and generally similar to the English version; the internal reliability for the English version and the Spanish version for each subscale are as follows: Active Coping (.68, .58), Planning (.73, .60), Positive Reframing (.64, .59), Acceptance (.57, .30), Humor (.73, .79), Religion (.82, .80), Using Emotional Support (.71, .78), Using Instrumental Support (.64, .64), Denial (.54, .64), Venting (.50, .58), Substance Use (.90, .93), Behavioral Disengagement (.65, .63), and Self-Blame (.69, .58) (Morán, Landero, & González, 2010; Perczek, Carver, Price, & Pozo-Kaderman, 2000; Prelow, Tein, Roosa, & Wood, 2000). Additionally, the factor structure has been replicated for all scales, except the Active Coping and Planning scales, which loaded together (Morán et al., 2010; Perczek et al., 2000; Prelow et al., 2000).

**Depressive symptomology.** The Center for Epidemiological Studies Depression Scale (CES-D) – Spanish Version is a 20-item scale used to measure cognitive, affective, motivational, and somatic symptoms of depression (Radloff, 1977). Participants are asked to indicate the extent to which s/he has recently had a variety of experiences. Response choices range from 0 (*rarely*) to 3 (*most of the time*). Scores of 16 or higher

represent caseness of depression. Alpha levels for the Spanish version fall within the acceptable range (.90 or higher) and are similar to that of the English version (.89; Prelow et al., 2000). Additionally, the factor structure of the Spanish version was supported (Masten, Caldwell-Colbert, Alcala, & Mijares, 1986; Prelow et al., 2000). Finally, research has demonstrated that this scale measures concepts relevant to understanding the mental health of Latino immigrants (J. G. Grzywacz, Hovey, Seligman, Arcury, & Quandt, 2006).

**Help seeking behaviors.** Given that no standardized measure of formal, informal, and indigenous/folk help seeking existed for this population, a new measure was created. Adapted from a measure in the National Survey of Family Life, the *Help Seeking Behavior Form*, developed by the study facilitator and translated into Spanish and back-translated into English by IRB-approved translators, was used to collect information about various forms of help seeking. This form included items asking participants whether they had ever sought help for mental health problems from friends/relatives, doctors, psychologists/psychiatrists/counselors, a religious leader, *curandera/o* (folk healer), *Espiritista/brujo* (Spiritualist/witch), or another sources. Additionally, it asked participants how often they had sought services from these sources in the past year; scores range from 1 (*never*) to 4 (*five or more times*).

### **Procedures**

Recruitment of participants occurred both within the Everglade Community as well as through EnFAMiLIA, a social service agency. Research assistants, consisting of bilingual, bicultural undergraduate students and EnFAMiLIA staff, assisted the study investigator in the collection data and served as her community liaison. The study

investigator corresponded with the directors of EnFAMiLIA on a monthly basis to update them on the study and receive feedback from the community regarding the study. Eligible families were recruited in person during community events at the Everglades Farmworker Village and from calls to individuals who had previously participated in EnFAMiLIA programming. Participants were asked their preferred location for completing the measures: within their community at a common space where confidentiality could be ensured or at a room in the EnFAMiLIA office. During the consent process, the researcher assistants took extra time to explain confidentiality and reassure participants that they would not be directly asked about their documentation status. Additionally, the research assistants explained and emphasized that only aggregated data would be shared with EnFAMiLIA, the community, and in publications. To be culturally respectful of their backgrounds, research assistants asked participants about their language preferences and their preferred method by which to complete the measures (e.g., reading to themselves, having items read to them by research assistants). Upon completion, participants were thanked for their participation and compensated for their time with a \$10 gift card.

## **Quantitative Results**

### **Preliminary Analysis**

SPSS v17 was used to complete the preliminary analyses for quantitative data. In an effort to identify any potential data entry errors and outliers within the data, an examination of the distribution of scores was conducted. Analyses indicated that data was not systematically missing because the number of missing values per observation was consistent and no patterns of missing data were observed. Therefore, serial mean

imputation was used to address missing data. Frequency distributions were used to determine how to best use the data from the outcome measure, help seeking behaviors. Data and theory (J. G. Grzywacz, Suerken, et al., 2007; J. Poss et al., 2005; Ramos-Sánchez & Atkinson, 2009; Waldstein, 2008) suggested it was appropriate to create a total score for the frequency of using any type of help, as well as the frequency of using formal services (i.e., doctors and psychologists/psychiatrists/counselors) and the frequency of using informal services (i.e., relatives/neighbors and religious leaders). As previously reviewed, the literature suggests that several structural and possibly cultural barriers prevent migrant workers from seeking formal, professional help, even when they believe it may alleviate their presenting concerns. Therefore, in addition to professional help, the literature indicates that some migrant workers seek indigenous treatments from traditional healers and find this help as effective as formal, professional help (e.g., Horton & Stewart, 2012). Finally, the literature on coping and social support suggests that Latina/os and potentially Latina/o migrant workers rely on family, friends, and neighbors to provide instrumental and emotional support to help them navigate various stressors (e.g., Aranda et al., 2001; Padilla et al. 1988). Given that extant studies use various subscales of the Brief COPE in their final analyses, preliminary analyses (e.g., tests of assumptions, correlations with the outcome variables, et cetera) were conducted to select the subscales to use in the final regression analyses. Based on these preliminary analyses, it was determined that the Active Coping, Religion, and Using Emotional Support subscales would be appropriate to include in the final regression model. Finally, assumptions of hierarchical regression were tested.

**Descriptive Statistics.** Most participants indicated that they did not receive public assistance (86%) or have health insurance (94%). Fifty-four percent described their health as very good or good, 30% described their health as intermediate, and 16% described their health as bad or very bad. Based on their responses of the ARSMA, 74% of participants meet the criteria established by Cuellar et al. (1995) to be classified as Traditional Mexican/Latina/o ( $AOS \leq 3.24$  and  $MOS \geq 3.70$ ) and 1% met criteria to be classified as Assimilated ( $MOS \leq 2.44$  and  $AOS \geq 4.11$ ).

Nearly one-third of participants (30%) met caseness for depression, when using the established cut-off of a CES-D score of 16 or greater, and the mean level of depressive symptomology was 14.30 ( $SD = 5.12$ ). Using the parameters established by the creator of the Attitudes Toward Seeking Professional Help, with scores above 43.5 are suggestive of more positive attitudes, fifteen percent of participants indicated positive attitudes toward seeking professional help and the mean score of participants was 29.12 ( $SD = 11.69$ ).

Forty-four percent of participants described using active coping “a lot” and a small proportion (8%) reported they never used this coping strategy. Forty-eight percent of participants indicated they used religious coping “a lot,” while nineteen percent reported they had not employed this strategy. Approximately a quarter of participants (23%) described using emotional support to cope “a lot;” however, a third of participants (34%) indicated they never used this coping strategy.

The mean frequency of total help seeking was 9.01 ( $SD = 2.74$ ) and 18% of participants reported they had not sought any form of help for mental health problems in the twelve months. The mean level of formal help seeking was 3.09 ( $SD = 1.48$ ) and 52%

of participants reported they had not sought professional help for mental health problems in the twelve months, while 4% reported seeking professional help five or more times in the past year. Of those seeking formal help, more sought help from a medical doctor (36%) than from a mental health professional (25%). The mean level of informal help seeking was 3.76 ( $SD = 1.70$ ) and 32% of participants reported they had not sought help from family, friends, neighbors, or religious/spiritual leaders for mental health problems in the twelve months. Ten percent of participants reported seeking informal help five or more times in the past year. The mean level of indigenous/folk help seeking was 2.16 ( $SD = .89$ ) and 96% of participants reported they had not sought indigenous or folk healing for mental health problems in the twelve months.

#### **Checking the Assumptions.**

**Linearity.** Review of the scatterplot of the independent variables and the dependent variables indicates linearity is a reasonable assumption. Additionally, with a random display of points falling within an absolute value of 2, a scatterplot of unstandardized residuals to predicted values provided further evidence of linearity.

**Normality of errors.** The assumption of normality was tested via examination of unstandardized residuals. Review of the S-W test for normality, skewness, and kurtosis statistics for all variables suggested that normality was a reasonable assumption. The boxplots suggested a relatively normal distributional shape of the residuals. The Q-Q plots and histograms suggested normality was reasonable.

**Independence of errors.** Given that study inclusion opened possible concerns about independence (i.e., both a husband and a wife could participate in the study), independence was closely examined. A relatively random display of points in the

scatterplots of standardized residuals against values of the independent variables and standardized residuals against predicted values provided evidence of independence. Additionally, separate analyses were conducted for the 12 participants who participated with their partners. With each of these six couples, scores on the independent and dependent variables were compared and appeared to be independent.

***Homoscedasticity of errors.*** A relatively random display of points, where the spread of residuals appears fairly consistent over the range of the independent variables (in the scatterplots of the standardized residuals against predicted values and standardized residuals against values of the independent variables) provided evidence that the assumption of homoscedasticity was met. No fan shaped spread was present in the data.

***Multicollinearity.*** Tolerance was greater than .1 and the variance inflation factor was less than 10 for all independent variables, suggesting that multicollinearity was not an issue.

### **Hypothesis Testing**

SPSS v17 was used to conduct all quantitative hypothesis testing analyses in this study. First, alphas levels for all measures were conducted to examine internal consistency. Second, descriptive analysis of the scores on all measures was used to provide contextual information about this population. Third, basic correlations for potential confounding or moderating variables (e.g., age, gender) were conducted.

***Reliability.*** Internal reliability analyses, using Cronbach's alpha, were conducted for all scalable independent and dependent variables. Given that the majority of participants preferred to speak and read Spanish over English, reliability analyses only reflect the reliability of the Spanish measures. The Attitudes Toward Seeking

Professional Help scale consisted of 29 items and the Cronbach's alpha was .74. The depression inventory (CES-D) consisted of 20 items ( $\alpha = .79$ ). For the ARSMA, the Anglo Orientation Subscale consisted of 13 items ( $\alpha = .90$ ) and the Mexican Orientation Subscale consisted of 17 items ( $\alpha = .78$ ). On the Brief COPE, the Active Coping subscale consisted of 2 items ( $\alpha = .70$ ), the Planning Coping subscale consisted of 2 items ( $\alpha = .65$ ), the Positive Reframing subscale consisted of 2 items ( $\alpha = .63$ ), the Religion subscale consisted of 2 items ( $\alpha = .81$ ), and the Using Emotional Support subscale consisted of 2 items ( $\alpha = .80$ ). Finally, for the help seeking measure, total help seeking consisted of 6 items ( $\alpha = .45$ ), formal help seeking consisted of 2 items ( $\alpha = .38$ ), and informal help seeking consisted of 2 items ( $\alpha = .30$ ).

**Correlations.** Various significant correlations existed between the regression model variables, as noted in Table 4. Gender and depressive symptomology were significantly correlated,  $r = .22, p = .02$ . Gender was also correlated with attitudes toward seeking professional help,  $r = .19, p = .04$ . Acculturation was correlated with enculturation ( $r = -.484, p < .001$ ) and using emotional support to cope ( $r = .21, p = .02$ ). Religious coping was correlated with several other variables: using emotional support to cope ( $r = .50, p < .001$ ), active coping, ( $r = .46, p < .001$ ), depressive symptomology ( $r = .39, p < .001$ ), and attitudes toward seeking professional help ( $r = -.26, p < .01$ ). Using emotional support to cope was significantly correlated with several other variables: active coping, ( $r = .49, p < .001$ ), depressive symptomology ( $r = .27, p < .01$ ), and attitudes toward seeking professional help ( $r = -.18, p = .04$ ). Active coping was significantly correlated with several other variables: depressive symptomology ( $r = .33, p = .001$ ), and attitudes toward seeking professional help ( $r = -.26, p < .01$ ). Frequency of informal help

seeking was significantly correlated with religious coping ( $r = .20, p = .02$ ), using emotional support to cope ( $r = .48, p < .001$ ), active coping ( $r = .23, p = .01$ ), depressive symptomology ( $r = .19, p = .03$ ), and frequency of total help seeking ( $r = .75, p < .01$ ). Frequency of formal help seeking was significantly correlated with frequency of informal help seeking ( $r = .31, p < .01$ ) and frequency of total help seeking ( $r = .79, p < .01$ ). Finally, frequency of total help seeking was correlated with using emotional support to cope ( $r = .26, p = .01$ ).

**Regression.** A hierarchical linear regression model was conducted to determine if help seeking could be predicted from demographic variables, acculturation, coping strategies, level of depression symptomology, and attitudes toward seeking professional help. Separate regressions were conducted for each of the three help seeking outcome variables: total help seeking, formal help seeking, and informal help seeking. The null hypotheses tested were that the multiple  $R^2$  coefficient was equal to 0 and that the regression coefficients were equal to 0.

Based on theory generated from previous literature (Baer, 1996; Chen & Vargas-Bustamante, 2011; Hiott et al., 2006; J. E. Poss, 2000) with Latina/os and preliminary analyses (as previously described), the Block 1 was comprised of gender. Block 2 consisted of acculturation and enculturation, and Block 3 contained coping strategy, depressive symptomology, and attitudes toward seeking professional help. Block 4 consisted of the interaction between depressive symptomology and religious coping. This interaction term was chosen due to the significant correlation between depressive symptomology and religious coping. Additionally, literature with Latina/os indicates a direct relationship between these two variables and suggests that some forms of religious

coping predicted greater levels of depressive symptomology (Abraído-Lanza, Vásquez, & Echeverría, 2004; Herrera, Lee, Nanyonjo, Laufman, & Torres-Vigil, 2009). Three separate regression models were conducted for each type of help seeking (i.e., informal, formal, and total).

**Informal help seeking.** As shown in Table 5, the first regression used informal help seeking as the outcome variable; the overall model summaries for each block are as follows. For Block 1,  $R^2 < .01$ , adjusted  $R^2 = -.01$  and the overall model was not significant  $F(1, 92) = .16, p = .69$ . For Block 2,  $R^2 = .09$ , adjusted  $R^2 = .06$ ,  $\Delta R^2 = .08$ ,  $\Delta F(2, 90) = 4.12, p = .02$ , and the overall model was significant  $F(3, 90) = 2.80, p = .04$ . For Block 3,  $R^2 = .30$ , adjusted  $R^2 = .23$ ,  $\Delta R^2 = .21$ ,  $\Delta F(5, 85) = 5.21, p < .001$ , and the overall model was significant  $F(8, 85) = 4.55, p < .001$ . For Block 4,  $R^2 = .33$ , adjusted  $R^2 = .26$ ,  $\Delta R^2 = .03$ ,  $\Delta F(1, 84) = 3.95, p = .05$ , and the overall model was significant  $F(9, 84) = 4.63, p < .001$ . The overall results of the regression suggest that a significant proportion (26%) of the total variance in informal help seeking was predicted by gender, acculturation, coping strategy, depressive symptomology, and attitudes toward seeking professional help.

Given that Block 4 explains the most variance in informal help seeking and the model contains all variables entered in each block, the regression coefficients reported stem from the model in Block 4, as shown in Table 6. For using emotional support to cope, the standardized slope ( $\beta = .46$ ) is statistically significantly ( $t(92) = 3.92, p < .001$ ); with every standardized one-point increase in the level of using emotional support, the frequency of informal help seeking will increase by .46 of a standard deviation when controlling for all other variables in the model. For depressive symptomology, the

standardized slope ( $\beta = .27$ ) is statistically significantly ( $t(92) = 2.10, p = .04$ ); for every one standardized point increase in the level of depressive symptomology, the frequency of informal help seeking will increase by .27 of a standard deviation when controlling for all other variables in the model. Change in expected informal help seeking, given a one-unit increase in religious coping, was  $-.38$ , after controlling for main effect of the moderator (i.e., depressive symptomology). Results indicate that the interaction term was statistically significant ( $t(92) = -1.99, p = .05$ ). As shown in Figure 1, this interaction demonstrates that the effect of religious coping on informal help seeking differs depending on the level of depressive symptomology. A negative relationship between religious coping and informal help seeking was found for participants whose level of depressive symptomology was high or medium, while a positive relationship was found for participants who have low levels of depressive symptomology.

**Formal help seeking.** Table 7 illustrates the second regression analysis, which used formal help seeking as the outcome variable; the overall model summaries for each block are as follows. For Block 1,  $R^2 = .01$ , adjusted  $R^2 = -.002$ , and the overall model was not significant  $F(1, 92) = .82, p = .37$ . For Block 2,  $R^2 = .04$ , adjusted  $R^2 = .008$ ,  $\Delta R^2 = .31$ ,  $\Delta F(2, 90) = 1.45, p = .24$ , and the overall model was not significant  $F(3, 90) = 1.24, p = .30$ . For Block 3,  $R^2 = .07$ , adjusted  $R^2 = -.02$ ,  $\Delta R^2 = .03$ ,  $\Delta F(5, 85) = .60, p = .70$ , and the overall model was not significant  $F(8, 85) = .83, p = .58$ . For Block 4,  $R^2 = .11$ , adjusted  $R^2 = .01$ ,  $\Delta R^2 = .03$ ,  $\Delta F(1, 84) = 3.22, p = .08$ , and the overall model was not significant  $F(9, 84) = 1.12, p = .36$ . Therefore, these overall results of the regression suggest that the proportion of the total variance in formal help seeking was not significantly predicted by gender, acculturation, coping strategy, depressive

symptomology, and attitudes toward seeking professional help. Finally, as shown in Table 8, none of the regression coefficients from Block 4 were significant.

**Total help seeking.** The third regression, as shown in Table 9, used total help seeking as the outcome variable; the overall model summaries for each block are as follows. For Block 1,  $R^2 < .01$ , adjusted  $R^2 = -.008$  and the overall model was not significant  $F(1, 92) = .263, p = .61$ . For Block 2,  $R^2 = .03$ , adjusted  $R^2 = -.007, \Delta R^2 = .02, \Delta F(2, 90) = 1.04, p = .36$ , and the overall model was not significant  $F(3, 90) = .781, p = .51$ . For Block 3,  $R^2 = .11$ , adjusted  $R^2 = -.02, \Delta R^2 = .08, \Delta F(5, 85) = 1.53, p = .19$ , and the overall model was not significant  $F(8, 85) = 1.26, p = .28$ . For Block 4,  $R^2 = .15$ , adjusted  $R^2 = .06, \Delta R^2 = .05, \Delta F(1, 84) = 4.72, p = .03$ , and the overall model was not significant  $F(9, 84) = 1.69, p = .10$ . Therefore, these overall results of the regression suggest that the proportion of the total variance in total help seeking was not significantly predicted by gender, acculturation, coping strategy, depressive symptomology, and attitudes toward seeking professional help.

Given that Block 4 explains the most variance in informal help seeking and the model contains all variables entered in each block, the regression coefficients reported stem from the model in Block 4. However, given that overall model only trended toward significance, these regression coefficients should be interpreted with caution. For using emotional support to cope, the standardized slope ( $\beta = .28$ ) is statistically significantly ( $t(92) = 2.13, p = .04$ ); with every standardized one-point increase in the level of using emotional support, the frequency of informal help seeking will increase by .28 of a standard deviation when controlling for all other variables in the model. For depressive symptomology, the standardized slope ( $\beta = .32$ ) is statistically significantly ( $t(92) = 2.26$ ,

$p = .03$ ); for every one standardized point increase in the level of depressive symptomology, the frequency of informal help seeking will increase by .32 of a standard deviation when controlling for all other variables in the model. Change in expected informal help seeking, given a one-unit increase in religious coping, was  $-.28$ , after controlling for main effect of the moderator (i.e., depressive symptomology). Results indicate that the interaction term was statistically significant ( $t(92) = -2.17, p = .03$ ). This interaction demonstrates that the effect of religious coping on informal help seeking differs depending on the level of depressive symptomology.

### **Quantitative Discussion**

The quantitative phase of this study explored help seeking patterns and predictors in order to extend the knowledge base about migrant workers. The purpose of this survey study was to explore help seeking patterns and the type of help utilized for mental health problems. Additionally, it examined the relationship between acculturation, coping strategies, level of depressive symptomology and help seeking attitudes. Finally, this study assessed the role of acculturation, coping strategies, level of depressive symptomology and help seeking attitudes as predictors of help seeking behavior in migrant workers in South Florida.

The current study provides an expansion of current literature on migrant workers. Specifically, most studies of mental health and healthcare utilization take place with migrant workers in the Western, Midwestern, or central Eastern streams. This study is one of the few conducted with migrant workers located at the start of the Eastern stream. Several factors suggest that South Florida migrants' experiences may diverge from those of workers in other locations. First, approximately two-thirds (63%) of individual living

in this area identify as Latina/o and sixty-one percent report speaking a language other than English at home (U.S. Census Bureau, 2010), and these rates are significantly higher than the national average. Second, the crop cycle in this area is longer than in many other regions so many South Florida workers migrate less frequently than their counterparts in other parts of the country. Third, many South Florida migrants have access to safe and secure housing and living conditions; this differs from the typical migrant worker who resides in overcrowded, dilapidated conditions. Furthermore, while representative of South Florida migrant workers, the current study's participants differ from the national demographic profile of migrant workers; the study was more heterogeneous in terms of ethnicity, slightly older than the average, and significantly more educated. Additionally, three-quarters of this sample consisted of women, most of whom were migrant workers themselves. The choice to also include partners of male migrant workers in the sample acknowledges that partners share many aspects of migrant experience and that Latinas frequently play an important role in help seeking and caregiving decisions (e.g., Flocks et al., 2012; Horton & Stewart, 2012). As indicated in this study, gender is associated with depressive symptomology and attitudes toward seeking professional help; therefore, female migrants and partners of migrants require attention as one component of a more comprehensive understanding of mental health correlates in migrant workers.

This study provides nascent findings about help seeking patterns in migrant workers, which have been previously unexamined in the extant literature. Furthermore, personal factors that may promote resilience among farmworkers are poorly understood (e.g., Crain et al., 2012). In light of the high level of contextual and occupational stressors faced by this population, coupled with higher rates of depressive symptomology than the

general U.S. population, this exploration is imperative and can provide fodder for those working to understand the strengths and needs of this population. The current study found rates of depressive symptomology similar to that of other research with migrant workers, suggesting mental health disparities exist within migrant workers. Findings also indicate that almost a fifth of participants have not sought any form of help for mental health problems in the twelve months. Almost none of the participants used indigenous or folk healing, half had not used any form of professional help, and only a third reported that they had not sought help from family, friends, neighbors, or religious/spiritual leaders.

These findings provide fodder for understanding help seeking in several different ways. Several factors help to contextualize these patterns. The majority of participants described religion as having a heavy influence on their lives. Religious coping was correlated with several other variables: using emotional support to cope, active coping, depressive symptomology, and attitudes toward seeking professional help. Additionally, using emotional support to cope and active coping were significantly correlated with depressive symptomology and attitudes toward seeking professional help. Given that approximately half of participants indicated that they used active coping and religious coping frequently and a quarter reported they used emotional support to cope, it is unsurprising that the majority of participants have sought informal help. Additionally, the high rate of uninsured participants and the low rate of favorable attitudes toward seeking professional help provide understanding about potential factors contributing to the rates of formal help seeking, even within the presence of elevated rates of depressive symptomology. However, these findings, and the finding that more individuals who seek

formal help use medical doctors than mental health professionals, are still surprising in light of the sampling strategy, whereby participants were primarily recruited through a community agency that offers a variety of services, including mental health services. These factors have implications for both access as well as beliefs about the ability of professional help to ameliorate or solve mental health problems. While much of the migrant literature focuses on access to services, beliefs about mental health providers are rarely discussed. Instead, studies tend to focus on the use of indigenous or folk medicine, such as a *curandero*. While approximate one-fifth of migrant workers use indigenous approaches, they mostly did so to treat fatigue, genitourinary problems, and ethno-specific illnesses (Weigel & Armijo, 2012). The current study suggests that indigenous healing is rarely used by migrant workers to treat mental health problems.

Based on these help seeking patterns, it logically follows that only the regression analysis with informal help seeking as the outcome variable was significant. Results indicated that a significant proportion (26%) of the total variance in informal help seeking was predicted by gender, acculturation, coping strategy, depressive symptomology, and attitudes toward seeking professional help. Acculturation, using emotional support, depressive symptomology, and attitudes toward seeking professional help emerged as significant regression coefficients. Furthermore, the interaction term was significant, which demonstrates that the effect of religious coping on informal help seeking differs depending on the level of depressive symptomology. A negative relationship between religious coping and informal help seeking was found for participants whose level of depressive symptomology was high or medium. A positive relationship was found for participants who have low levels of depressive symptomology.

These results provide an additional dimension to the understanding of religious coping and help seeking in Latina/os. One explanation of the current study is that individuals with higher levels of depressive symptomology may find it more difficult to participate in religious activities or seek help from informal sources such as family, friends, and religious leaders. Previous studies (e.g., Herrera et al., 2009) found that negative religious coping leads to higher levels of depressive symptoms. Therefore, although not directly assessed, it is possible that some negative forms of religious coping contribute to the current findings. For example, if participants felt that their current stress and depressive symptoms were a punishment from God or that God had abandoned them, they may be less likely to seek help from religious leaders or their religious community.

These results, taken with the nonsignificant results from the regressions with formal and total help seeking as outcome variables, provide information about how psychologists can understand and promote help seeking, even when we know little about correlates of formal help seeking. Migrant workers face occupations stressors ranging from discrimination, abuse, disempowerment, and exploitation, as well as contextual stressors such as undocumented status, lack of transportation, poverty, and lack of insurance. Most participants said their primary reason for migrating was for a better future or work and that they did not regret their decision to migrate. Given the state of stress and lived experiences of migrant workers, the strength of this population is evidenced in this study's results. First, it is necessary to acknowledge that, within the context of migrant workers' multi-faceted and omnipresent stressors, the level of depressive symptomology found within this population is remarkably low. These factors are also barriers to help seeking; lack of insurance, poverty, and lack of documented

status prevent migrant workers from gaining access to formalized healthcare and mental health services. The help seeking patterns in the current study indicate not only that migrant workers harness adaptive coping mechanism and use external strengths in their lives, such as religious leaders and the support of friends and neighbors, but that they themselves are likely called upon to provide support to others. These types of interactions may help to reify the sense of community and connect workers with each other, as suggested in the second, qualitative portion of this study. Additionally, acculturation and enculturation may play a part in these help seeking patterns, given that previous literature has found that Latina/os tend to harness informal support networks to cope with mental health stressors (Aranda et al., 2001; Crockett et al., 2007; Padilla et al., 1988; Puente-Díaz & Anshel, 2005).

### **Clinical Implications**

This quantitative phase provides psychologists with valuable information about the help seeking patterns and correlate of mental health of migrant workers. Specifically, this study identified the central role of informal help seeking for mental health problems. Additionally, it added to extant knowledge about the role of religious coping and predictors of informal help seeking. Finally, it provides information about the relationship between level of depressive symptomology, religious coping, and informal help seeking.

Armed with this knowledge, psychologists can work with communities to promote their well-being. In the process of working to establish these services, psychologists should work with medical doctors to identify the strengths and needs of this community, as more migrants see medical doctors for their mental health concerns.

Additionally, service providers should be mindful of contextual factors that can support help seeking, such as the inclusion of family members as appropriate, flexible and evening hours, sliding scale or pro bono services, and paying attention to and exploring perceptions of illness and well-being. Furthermore, psychologists can harness the strengths of adaptive coping patterns and consider collaborating with religious leaders to provide care. For those psychologists involved in community-based interventions, the results of this study suggest looking beyond the standard menu of initiatives. In addition to an increase in social services that are available regardless of documentation status, programs that strengthen families and the community through the use of mediums such as art, food, and physical activity can help to promote relationships necessary for informal help seeking. Additionally, these initiatives provide a forum for psycho-education, know-your-rights workshops, and relationship building between mental health service providers and migrant workers in a non-professional environment.

### **Limitations**

The main limitations of the quantitative phase of this study are germane to exploratory studies. This study was cross-sectional, with a small, non-random sample with unknown biases that may have affected self-selection into the study. Although efforts were taken to emphasize confidentiality and that individual study responses would not be shared, the study was recruited primarily through a community agency; the nature of participants' relationship with this agency and the services utilized were unknown and may have affected recruitment as well as responses. Additionally, potentially confounds may have resulted from an unknown lifetime history of psychiatric disorder, effects of other, unmeasured stressors, and culturally specific disorders. In regards to level of

depressive symptomology, it is important to recognize that some authors suggest higher cutoff for caseness for Latino populations (e.g., Crain et al., 2012). The criteria used in this study reflect those most commonly used and enable comparison with other studies of migrant workers; however, the current number of individuals meeting caseness for depression may overestimate the prevalence. Finally, because no psychometrically sound measure of help seeking for migrant workers exists, an adaptation of an existing measure was used in the present study. Given the relatively low rates of internal reliability, these outcome measures have less power than desired and may diminish the explanatory power of the regression models. While this suggests that the statistically significant findings of this study were relatively robust (e.g., it is more difficult to produce significant findings when measures are psychometrically weak), it also underlies the most substantial limitation of the current study. These psychometric weaknesses curtail the study's ability to generate knowledge about help seeking in migrant workers.

Future studies with a larger sample should seek to replicate and extend these findings to help create a knowledge base about help seeking in migrant workers, attending to both individual and contextual characteristics. Given that few studies provide information about resilience factors, study designs should explore correlates of well-being as well as mental health problems. The field needs outcome measures that explore help seeking and have good psychometric properties. Finally, quantitative and qualitative research examining interventions to promote resilience, foster well-being, and treat mental health problems within migrant communities is needed to reify the emergent understanding of correlates of mental health and translate this knowledge into effective action.

## **Chapter 5: Qualitative Phase**

### **Qualitative Introduction**

#### *Exploring Perspectives of Well-Being in Latina/o Migrant Workers*

While previous research has identified factors related to Latina/o migrant workers' health and service utilization, few studies exploring the help seeking process exist. Therefore, using the Developmental Systems Theory (Lerner & Ford, 1992), several factors previously identified by the literature were the focus of the qualitative phase of inquiry. The purpose of this exploratory portion of the study was to understand the correlates of well-being, mental health, and help seeking patterns for Latina/o migrant workers in South Florida. The author asked three central questions that guided inquiry. First, what factors influence migrant workers' mental health and well-being? Second, how do these factors impact mental health and well-being? Third, what elements enhance and impede participants' help seeking behaviors and attitudes? This qualitative inquiry adds to the development a multi-level systems theory about supports and barriers to help seeking among migrant workers.

### **Qualitative Methods**

#### **Participants**

Purposive sampling was used to recruit 12 of the individuals who completed the first phase of quantitative data collection to participate in focus group discussions. Individuals chosen to participate in the qualitative data collection were selected for either their representativeness of the larger population or demographic factors that made them a negative case analysis (i.e., they deviated from the norms of the population in some significant way, such as by documentation status). Because of contextual factors, such as

difficulty with transportation, some focus groups became interviews when only one participant was present for data collection.

The average age of participants was 41.92 years ( $SD = 13.20$ ). Most participants were female (75%), married or cohabitating (60%), and had children (75%). Four percent of participants had no formal education, 66% of participants completed some or all of primary school education, 33% completed some or all of secondary school, and 8% completed a technical degree or an associate's degree. The majority of participants earned either less than \$500 per month (46%) or between \$500 and \$999 per month (36%). Participants of Mexican origin made up the largest portion of the sample (58%); the remaining participants were from Guatemala (21%) and El Salvador (21%). The majority of participants preferred to speak Spanish (92%) or both English and Spanish equally (8%). Participants were Catholic (58%) or Christian (42%) and most believed that religion influenced their lives "a lot" (68%). The majority of participants attended church weekly (58%) or more than once a week (17%), identifying themselves as very religious (50%). Most participants said their primary reason for migrating was for a better future (39%) or work (25%).

Sixty-four percent of participants received some form of residential assistance; for most, this took the form of subsidized rent in ECA. Most participants lacked health insurance (83%), therefore paying for medical services out of pocket (79%) and primarily seeking health services at a clinic (75%). Forty-two percent of participants reported that their health was "good" or "very good", while the same number reported their health was "bad" or "very bad." Data from the first, quantitative, phase of this study indicate that a

third of participants meet caseness for depression and only a fraction (17%) held positive attitudes toward seeking professional help.

### **Procedures**

Recruitment of participants occurred within the Everglade Community and through EnFAMiLIA. Research assistants, consisting of two bilingual, bicultural undergraduate students and EnFAMiLIA staff, assisted the study investigator in the collection data and liaising with the community. The study investigator corresponded with the directors of EnFAMiLIA on a monthly basis to update them on the study and receive feedback from the community regarding the study.

Approval from the university's institutional review board was obtained prior to recruitment and data collection. Bilingual facilitators led two focus groups, with a total of nine participants (four to five per group). Prior to starting the focus groups and interviews, food and refreshments were offered to participants. This served helped facilitators and participants become comfortable with each other and build rapport. After the refreshments, the facilitators then read consent forms, focusing on the need to maintain confidentiality, and then established rules for the group. These ground rules outlined the need for all voices to be heard, explained how to promote respect for confidentiality, using pseudonyms (so that the recorded files would be free from identifying information), and the flow of the focus group. During the consent process, the facilitators spent additional time explaining confidentiality and reassuring participants that they would not be directly asked about their documentation status. Additionally, the facilitators emphasized that only aggregated data would be shared with EnFAMiLIA, the community, and in publications. All of participants preferred to speak in Spanish. All

focus groups were therefore conducted in Spanish. They lasted between one and a half and two hours and were recorded using a digital audio recorder. Three individual interviews were also conducted, given difficulties in the ability to schedule focus group times. The interviews followed the same procedures as the focus groups.

The facilitators used a semi-structured focus group/interview guide, as shown in Appendix A. Questions were generated from findings in previous studies that had examined the mental health of migrant workers. All questions were translated into Spanish and back-translated into English. The list of questions was presented to the director of EnFAMiLIA for feedback. This guide included an opening question (e.g., “What are things you/your family/families in your community do to feel good and connected to family, friends, and loved ones?”) and open-ended questions related to how mental health is described in the community, stressors, root causes of stressors, treatments and healthcare services, barriers to help seeking, and definitions of well-being. If participants did not discuss details of these topics, probes were used to elicit perspectives regarding these issues. Participants were paid \$10 upon completion to compensate them for their time and travel.

### **Analysis Plan**

The audiotaped focus groups were transcribed by an IRB-approved transcription service. The transcripts were checked for accuracy. These transcripts were then analyzed using content analysis, which entails a systematic categorization of text that enables researchers to make replicable and valid inferences. Content analysis procedures vary depending on the purpose of the analysis (Krippendorff, 2004). Given the current study’s focus on exploring and extending current findings related to help seeking in migrant

workers, directed content analysis was employed to provide more complete information about this topic. In this deductive use of theory, the goal is to validate or conceptually extend a theoretical framework and provide information about the relationships among the variables (Hsieh & Shannon, 2005).

Using a deductive category application, directed content analysis occurs as an iterative process. The first author and two bilingual, bicultural research assistants reviewed the three interviews and two focus group transcripts in its original Spanish language. Additionally, an experienced bilingual, bicultural qualitative researcher conducted an audit of 10% of the transcripts to cross-check the data analysis. The analysis followed the specific procedural steps outlined for directed qualitative content analysis (e.g., Hsieh & Shannon, 2005). These steps included reading the transcripts multiple times, identifying significant statements (i.e., codes), developing an operational definition of the codes, then identifying underlying themes. Specifically, a provisional code list was drawn from nascent and established themes noted in the Latina/o migrant health literature (i.e., the studies reviewed in the introduction of this article). Throughout several preliminary readings of transcripts, two additional codes were created using an open coding, inductive approach. During the multiple readings and stages of analysis, codes were revised as some deteriorated, others were too general, and new codes were created to reflect newly emerging patterns (Mitchell Fuentes, 2008). Differences in coding were resolved by discussing the essence of the underlying meanings of categories and themes, linking them to quotations in the transcripts, and reflecting on these underlying elements until agreement was reached on the appropriate categorization and themes. Coding checks with three independent coders resulted in eventual consistency of

>90% (intra-coder reliability equals the number of agreements divided by the total number of agreements plus disagreements).

This deductive qualitative method allows for findings that can offer supporting and non-supporting evidence for a theory. Results are presented by showing codes with exemplars and offering descriptive evidence. Newly identified categories may offer a contradictory view of the phenomenon; alternately, they can further refine, extend, and enrich the theory. This method offers several benefits. The main strength of this approach lies in its ability to support and extend existing theory. Additionally, the directed content analysis approaches explicitly acknowledges that researchers are unlikely to be working from the naïve perspective that is often perceived as the cornerstone of naturalistic designs. However, several challenges also exist: a potential for bias, the nature of participants' answers to probing questions, and a potential overemphasis on theory (Hsieh & Shannon, 2005).

### **Qualitative Results**

Five central themes emerged from the focus group and interview data. These themes, their respective category codes, and code definitions are visually displayed in Tables 11 to 15.

#### **Children as a Point of Connection**

Participants provided rich descriptions of their interactions with their children and how these interactions improved families and connections between families in the community, which in turn was a protective health factor. They expressed hopes that their children would not only uphold their customs, values, and language, but also experience a greater degree of well-being. They demonstrated a keen awareness that their children's

experiences both directly and indirectly affects the family unit through a recursive process. Participants repeatedly spoke about their concerns related to immigration, describing an omnipresent fear that their own children or others in the community would be traumatized by the deportation of their parents or relatives. Many spoke about a desire to take their children back to visit their native countries and expressed a desire to return to a simpler time when there was less influence from media, peer pressure to use drugs and join gangs, and fewer teenagers engaged in pre-marital sex. “They are losing their innocence ... and this unsettles me.”

To protect their children from these threats to their healthy growth and development, as well as the integrity of their families, participants described various efforts to strengthen their relationships with their children.

Well, I no longer learn much because I'm old, but I take my son to activities and he is learning new things for himself in life, which it is very good. So I do attend these [activities], in order to learn what is best in life, because, not all the time do your children bring a good approach to what they plan to do. Then, you [as a parent] have to help them [your children] a little bit in order for them to make good choices.

Participants also noted a central point of connection emerged from being active with their children. Children serve as vessels for nurturing culture through language, music, dance, sports, church attendance and cooking. Furthermore, these activities provided fertile soil for imparting values such as a hard work ethic and being satisfied with life when basic needs are met. Families can engage in these events even when money is tight, a key requisite in the face of constant worries about money. These activities often take place in the community, providing a context that reinforced the parents' goals and afford parents the opportunity to engage with other families. Participants also described communal

parenting, whereby neighbors and friends would watch each other's children and felt responsible to provide guidance to any youth they encountered in the community.

These efforts became more focal when participants reflected on the resources available to their children that hold the key to preventing recurring cycles of stress and disempowerment. Participants expressed a desire to spend more quality time with their children, noting that the nature of their work limited the time they could dedicate to their families. Although separated from her family, one participant captured the importance of family: "to be healthy and well is to be reunited with family, spending time with family." Many participants voiced beliefs that children provide them with hope, given that youth will have access to a better education, more health resources, and more career opportunities. Even when participants were not able to believe these hopes could be realized for themselves because of documentation barriers, exhaustion and health problems related to work, and their older age, they noted that they felt less stressed when they focused on their children and their children's future.

### **Mosaic of Informal Support**

Participants described a multi-faceted network that supported them through various challenges. Participants noted a heightened importance of friends and neighbors in light of the barriers to visiting family in their native countries. They described these relationships, as well as their relationships with family members living in the U.S., as a pivotal component of their well-being. Frequently built through connections made via their children, participants consistently described relying on others in their community. "You can go to one who you trust like family, like a father or mother, and talk about the state of your life or problems and they will guide you." They described this process as

reciprocal and indirectly benefiting the family, given that decreasing one family member's stress will promote better communication within the entire family. Participants also noted that family and friends offer help by providing needed distraction from their problems, especially during engagement in patterns and rituals similar to those in participants' native countries. Many participants expressed a desire for an increase in cultural programs, which serve as a vehicle for strong community connections.

Participants spoke about the role of documented community members, noting that these member offer pivotal instrumental support. For example, documented individuals often help with transportation and may assist with legal matters. One documented participant noted that he often feels stressed.

It's difficult because the undocumented family thinks that one is obligated to help them because he is documented, but they do not stop to think a little of the problems that one goes through to help... But it is my duty to help.

Many in the community offer other forms of help; participants described help from neighbors and friends with raising their children, fixing things in the home, and sharing food. Participants expressed a desire to use any resources they possessed to improve the community.

Finally, participants noted that informal support networks help them maintain key aspects of their identity. They frequently spoke with pride about the value of hard work and a strong work ethic, noting that they feel connected to other workers who reify these values. Neighbors and friends also strengthen participants' cultural identities.

In my community, all of my neighbors are of different nationalities.... But we celebrate our different independence days together... We have different cultures, different levels of education, there are some people that do not know how to write and there are people that are professionals, but we relate to each other... and can resolve problems.

The community also provides support for participants' spiritual identities. Many participants described how religious rituals and church events foster faith and relationships within their church community. Additionally, they noted that religious leaders offered vital personal and spiritual guidance. This mosaic of support helps participants manage acute problems as well as chronic stressors.

### **Navigating a Multi-Stressed Life Context**

Participants consistently noted that the state of the economy lays at the root of stress, health problems, and mental health concerns. They described this stressor as more acute than usual because of a work shortage; some participants reported finding only eight hours of work per week. They noted that the decreased supply of work further exacerbates already unjust business practices, as bosses engage in increase exploitation of workers. "All of the food prices are rising and the salary is never raised. I do not know if this is done by the government that does not want us here." Some participants expressed the belief that economic stressors are germane to all countries, although they would not struggle with food insecurity in their home countries because they would have their own land on which to raise food.

Participants noted that the fallout of economic stressors is widespread. They described the chronic stressor of barely meeting basic needs, nonetheless healthcare.

When you do not have insurance, it makes it difficult to have a good interaction with the doctor because, while doing this, you are always going to take the money out of your pocket and count it. Because first you need to see that you brought enough because sometimes they will not accept you if you do not bring it [the total fee for service]. This is a huge, huge problem in the United States.

Participants described how this economic insecurity impacts help seeking patterns: the stress of having sufficient money, using money that is often required to meet other basic needs, and paying service fees that appear inflated can actually result in increased stress

worse health outcomes. The weak economy intersects with the lack of documentation to produce continual struggles with transportation. Although a bus passes through the community up to three times a day, many struggle to afford bus fare. This limits one's ability to work and access resources such as walk-in clinics that open early in the day. Furthermore, poverty causes families to live together or live in places that do not have addresses, frequently preventing them from qualification in certain regionally-based healthcare services. Therefore, these stressors create barriers that often prohibit the use of prevention, early intervention, or medication management services, even though participants recognized the importance of these services.

Participants described how economic stressors affected the community at large, leading to an increase in robberies, substance abuse, unsupervised youth, and family conflict/violence. Many noted ambiguity about police involvement to help with these issues. Although some believed that police in their community are less harsh toward undocumented immigrants than police in other states, all reported concerns of possible police corruption and fears that police involvement may lead to deportation for themselves or family members. This fear has led many participants to avoid reporting workplace abuses, sharing their identifying information with anyone, seeking services, and restricting where they travel. Participants went on to express ambivalent views about their hope for comprehensive immigration reform, noting that they want Congress to acknowledge the problems of their native countries and how migrants fuel the U.S. agricultural workforce. However, all participants noted that immigration reform could have the biggest impact on their multi-stressed life context.

### **Awareness of Lack of Agency**

Participants referred to the lack of agency inherent in their work and documentation status. The recognition of this disempowered status surfaces in many aspects of their daily lives and results from their multi-stressed life context. For example, immigrating without a visa prevents them from visiting family in their native countries or traveling to surrounding cities and states for fear of detection and deportation. One participant described how, depending on political factors, a differential experience of immigration exists.

The states in the south of Mexico are the poorest states in Mexico. The majority of people there are of indigenous origin. The government in Mexico does not pay much attention, therefore those people have to emigrate to find work. In the north as well, but those people emigrate with a visa... and almost all from the south arrive undocumented and work in the fields, in hard work. Those who are documented can work in less difficult jobs.

Regardless of nativity, participants noted that they arrive with a hope of a better life but find it difficult to actualize these dreams because of fears about the ambiguity of their future.

The nature of the work produces stress directly through the physical aspects of work and indirectly through the work environment. Participants described the physical demands of work as tiring, dangerous, and producing concerns about possible injuries for which they could not afford treatment. Moreover, they reported an inability to take appropriate precautions against chemical and sun exposure, mosquitos, and muscle tears for fear that they would be fired.

Normally the bosses here in the fields are abusive. They come here to set up their businesses because they know that the people here will not get paid overtime. They [migrant workers] put in many hours, do not have the ability to say anything. It makes me mad, it makes me stressed because they are violating your rights....The people arrive here after living in other places but they do not know

how things work here... if you are undocumented you cannot do anything. Nobody listens to you.

Additionally, many noted that when they do know their rights, they fear that they do not have the language skills to communicate these occupational violations or understand how to navigate the reporting system. These fears are reified when they witness inspectors that overlook unjust business practices. They also understand that their struggles go unnoticed. “When one goes to the supermarket and looks at the fruit, the vegetables, and says “how delicious!” and buying them is so easy, but they do not know how they has come to be.”

Participants reported the paradox of needing to work to improve their lives, while work simultaneously threatened their physical and mental health. Working places them at risk for documentation raids that, although rare, frequently concern them. They also worry that their long work hours – when they are available – keep them from their families and may increase problems with their children. This ongoing, chronic stress “causes fear. You do no know in which moment bad things are going to happen... this reality affects and bothers you.”

### **Toward the Promotion of Well-Being**

Participants described various components of mental and physical health and the sufficiency of services in their community. They noted a strong relationship between mental and physical health and how these components, coupled with their lived experiences, impact their help seeking and healthcare services.

Participants used a variety of terms to describe mental health problems, including *el estrés*, *nerviosismos*, and *ansiedad* (stress, nervousness, and anxiety). A few participants reported being familiar with families, especially from indigenous cultures,

that attributed some mental health problems to bad spirits. However, most noted that mental health problems stemmed primarily from their multi-stressed life context and are fed by fear of deportation and being unable to meet basic needs. Challenges in managing these omnipresent stressors results in a variety of mental health problems, including anger, anxiety, *nervios*, rumination, trauma symptoms in children, family and community violence, alcohol and drug abuse, repression of feelings (especially for men), and desperation. Participants stated that these stressors frequently manifest in physical symptoms, such as headaches, increased blood pressure, stomach pain, body aches, high blood sugar, and disrupted eating and sleeping patterns. They often used symbolism evoking physicality to describe these problems: “this [set of symptoms] is the sickness of stress.”

Participants provided a consistent picture of help seeking. They noted that, for small problems, the first step is to acknowledge that one is suffering, accept this reality, then utilize informal help seeking. They reported primarily using strategies such as talking about problems, exercise, distraction, or consultation with religious leaders to manage their symptoms. They employed these approaches, coupled with community engagement and strong familiar connections, to promote well-being. Participants described being healthy (*estar sano*) primarily as having mental and physical health and all of these affect one’s ability to work, connect with family, and live a peaceful life. Many participants described having sufficient money to meet basic needs, decreased worries, and access to necessary services as central to well-being.

Because when one is sick, the diabetics cannot eat many things. The people who have high blood pressure also cannot eat much. The people living with gastritis cannot eat much. The people who have skin problems cannot work in the sun or be exposed to certain chemicals.

Participants noted that the current structure and sufficiency of services fails to promote well-being. Factors such as high service fees, lack of transportation, clinic hours that conflict with working hours, and few clinics that see the uninsured decreased participants' ability to access services. Many voiced the belief that "to go to a doctor, it's too much money. So many of us we turn to home remedies treatments like tea." Some described the perspective that the charges at clinics felt exploitative, especially for those without insurance. For those with insurance, many noted that essential services were not covered, such as dental care, prescriptions and "mental health is not accessible financially - that's a very strong factor for why people will not go to it."

Even within the services accessed participants reported encountering barriers. Describing his concerns about having an infection in his hand, one participant noted his experience was characterized by a lack of help. "And sometimes, there's no help even if you're dying. I arrived at the hospital they sent me back." Even when they receive treatment, many participants reported experiencing language difficulties and low quality service in which providers did not take the time to talk to them to truly understand their problems. Many believed that this resulted in misdiagnosis and wasted time and money. Additionally, participants struggled to differentiate between Medicaid and Medicare services, although many of their children were enrolled in Medicaid. They reported trouble navigating these systems, especially given that healthcare in the United States works differently than in their native countries; here, appointments must be scheduled far out in advance, payment is due at the time of service, and few health materials are in Spanish.

Participants described several additional barriers to seeking mental health services with a psychologist or a psychiatrist. Some described stigma: individuals who seek services from a friend or a *curandero* may find the experience more palatable because they will not fear being told they are crazy. Additionally, professional services are expensive and waitlists are long. Finally, a few participants noted that the counseling may take too long before addressing their presenting concern and they fear that providers – even those who speak Spanish - will not be culturally attuned to their needs.

Participants generated several potential solutions to improve services. They identified the need to increase the number of service providers, especially those focused on mental health and prevention. They noted that the community itself could play a role in promoting well-being. For example, the migrant community rental offices could serve as a central point of access for health education materials and lists of service agencies. The community could grow its psychoeducational and parenting skills programs to allow parents to unite and improve themselves through the connection to their children. Finally, they focused on the need for social services to offset root problems, such as stress and documentation status.

### **Qualitative Discussion**

The qualitative phase of this study explored South Florida migrant workers' perspectives of well-being and factors influencing well-being. Specifically, the semi-structured interview asked participants about components of mental health and well-being, protective health factors, and help seeking patterns. Previous research regarding the well-being of migrant workers primarily focused on physical health components and service utilization for physical health concerns. Therefore, the current study adds to a

broader perspective of migrant workers' well-being. The Developmental Systems Theory facilitated this expanded perspective, by guiding the research to explore individual, communal, and context factors.

Many of the findings of this study are supported by previous literature, while others expand our knowledge base. First, participants reported several factors influencing their mental health that previously emerged in the literature. Economic stressors, struggles with transportation, concerns about deportation and documentation status, and fear parallel prior findings (e.g., Grzywacz et al., 2006, Quandt et al., 2007, Villarejo 2003). Some mental health components that previously had not received as much attention, yet participants consistently reported, also surfaced. Participants discussed the relationship between mental and physical health at both an individual and familial level, noting the inextricable link between these two prongs of well-being. Reemerging themes appear among various familial factors. Children serve as a point of connection and conduits for several potential protective factors. For example, through engagement with their children, participants work to maintain their familial and cultural identities, engage in more physical and cultural activities, and build support networks with other families in the community.

The second aim of this study focused on how these factors impact mental health and well-being. Participants described a complex relationship between the aforementioned factors and well-being. The theme of a multi-stressed life context emerged, encompassing participants' understanding of the interrelated and often recursive nature of individual, communal, and contextual stressors. These stressors may manifest as physical symptoms, mental health symptoms, or as increased violence.

Conversely, the protective factors delineated help individuals grow and strengthen informal support networks, as well as decrease their rumination and fear through distraction, behavioral activation, problem solving, and physical activity.

The third area of exploration concentrated on elements that enhanced and impeded participants' help seeking behaviors and attitudes. Many of the factors described by participants overlapped with previous findings of physical healthcare utilization. Cost, transportation, lack of insurance, fear related to documentation status, and language difficulties inhibit help seeking and converge with previous literature. Less examined elements, such as stigma, length of time required for treatment, and fears of being told that one is "crazy," were described by participants as barriers to seeking mental health services. Additionally, participants noted mixed perspectives of professional help seeking. Although all participants noted that professional help should be sought for large problems that are unsolvable by informal networks, they expressed some skepticism about the ability of mental and physical health care professionals to effectively and efficiently address their concerns. Finally, participants consistently reported that many community members lack education about available services and how to navigate these systems.

### **Limitations**

This study consisted of a convenience sample of twelve participants. Therefore, these findings may not represent the experiences of other migrant workers in the United States with different characteristics (e.g., less education). Given that scope of this study differed from existing explorations of health and help seeking in migrant workers, future studies are needed to enhance the credibility (i.e., confidence in how well data and

processes of analysis address the intended focus) and transferability (i.e., the extent to which findings can be transferred to other settings or groups) of the current findings.

In addition, many participants knew each other because of snowball sampling techniques; therefore, they may have felt inhibited in sharing their responses to sensitive questions. The focus group methodology is further threatened by group dynamics (e.g., one or more participants dominating the conversation). These limitations were, to some degree, offset by the inclusion of interview data. However, interview methodology faced its own potential threats. For example, interviews participants lacked the opportunity to use the responses of other participants as launching points for their own responses. Additionally, this one-on-one format may have negatively impacted their comfort levels (e.g., they were not part of a larger discussion with members of their community and were only speaking with someone outside of their community).

Although limitations exist, few studies have specifically examined barriers to mental health help seeking in Latina/o migrant workers. One of the strengths of this study lays in its community-based design. Throughout the study, continual contact with directors of EnFAMiLIA helped to ensure a culturally-sensitive process. Additionally, feedback regarding the phrasing of the semi-structured questionnaire helped to ensure clarity of the questions, that questions directly mapped onto the constructs of interest, and that participants felt comfortable with the question asking process. Finally, the community-based design promoted the researchers' credibility within the community because of their association with a well-respected community organization.

This study aimed to contribute to a systems theory about supports and barriers to help seeking among migrant workers. Quantitative, qualitative, and mixed-methods

research is needed to further this theory development. Understanding the complex factors impacting help seeking serves as a crucial first step to reducing the staggering health disparities in this community. Knowledge generated can also contribute to the political discourse about immigrants. Even simple demographic information, such as that cited in the larger, quantitative phase of this study, can counteract misconceptions about how migrant workers pay for and seek services. This type of research can also influence organization and community change. For example, participants identified several actionable steps to enhance access to services, such as evening clinic hours, education campaigns about available services, and a need for more transparency and guidance in navigating health care systems. They also highlight the need for increased community support and programs to promote community culture and connection. Finally, the current study and previous research underscore the need for culturally sensitive service providers who look beyond a myopic view of individual-level factors that impact health. Understanding the socio-contextual factors that pervade migrants' lives will not only enhance providers' ability to offer more effective and tailored care, but will also promote stronger provider-patient relationships.

## Chapter 6: General Discussion

This community-based mixed-methods dissertation contributes to a more nuanced understanding of help seeking patterns for mental health concerns in Latina/o migrant workers. One of the most substantial contributions of this work lies in the use of Lerner and Ford's (1992) Developmental Systems Theory. Using this framework, the quantitative and qualitative findings provide information about individual, communal, and contextual level factors that influence help seeking. Additionally, the mixed-methods design provides generalizable findings while giving voice to participants' experiences. Finally, the community-based approach enables meaningful, sustainable engagement with the community, guiding the research process and ensuring that knowledge generated directly benefits the community.

Informal help seeking emerged as one of the most central elements of this dissertation study. Informal help seeking was the primary source of help for mental health problems. Several individual level predictors of informal help seeking emerged: gender, acculturation, enculturation, using emotional support to cope, active coping, religious coping, level of depressive symptomology, attitudes toward seeking professional help, and the interaction of depressive symptomology and religious coping. Furthermore, level of depressive symptomology moderated the effect of religious coping on informal help seeking. The qualitative phase helped to deepen the understanding of informal help seeking patterns by exploring communal and contextual level factors. Participants noted that they engaged in informal help seeking for a variety of reasons. First, informal help is more widely available and cost-effective than formal, professional help. Second, engaging in informal help seeking can produce both direct and indirect benefits: it can

help to strengthen community connections, reify protective enculturation elements, and help to promote individuals' spiritual/religious identities. Finally, informal help seeking enables individuals to avoid the stigma sometimes associated with seeking formal mental health services. These results highlight the key role of informal help seeking and the need for psychologists to engage in initiatives to strengthen the protective factors embedded in these informal networks. For example, partnering with religious organizations and engaging in projects focused on strengthen the community as a whole will promote the well-being of this population. Alternately, initiatives such as *Promotores de Salud* can harness the strength of these informal networks by using community members as health promotion workers who spread psycho-education, provide information about existing services and resources, and serve as liaisons between the community and formal mental health services.

As previously discussed, the quantitative regression models for formal and total help seeking were not significant but trended toward significance. However, these results are unsurprising in light of the broader quantitative and qualitative findings. Only a small proportion of individuals sought formal mental health services and almost none used indigenous help for mental health problems. Furthermore, participants' narratives indicated numerous contextual barriers prevented the use of formal mental health services, such as lack of transportation, high service fees, lack of insurance or coverage of mental health services, stigma, language and cultural barriers, and a mixed perspective about the effectiveness of formal services.

Taking a step back from specific help seeking patterns, the current research underscores the pivotal role of contextual factors. These factors not only influence help

seeking patterns, but also impact migrants' well-being. The quantitative models are limited in their ability to capture these contextual factors which participants denoted as the root causes of mental health problems in their community. Participants indicated that only marginal improvements in mental health and help seeking could be made when these root causes (e.g., undocumented status, workplace abuses, lack of health insurance) remain unchanged.

### **Limitations**

This study faces several limitations. As previously noted, several aspects of this sample may limit its generalizability to the broader Latina/o migrant worker population. For example, compared to previous studies and national estimates of demographic factors, the participants in the current study had a higher level of educational achievement, a larger proportion of the study was women, and the study contained a wider variety of countries of nativity. These differences may be linked to the location of the study or could reflect sampling error. Additionally, recruitment occurred through a community organization that offers social and mental health services; therefore, participants' help seeking patterns may not represent those of the broader community. The association with this community organization may have also produced some demand characteristics, such that participants inhibited their responses about existing services in the community. Finally, this sample differed from the population on a key contextual factor. Virtually all participants in the current study lived in safe, secure, and clean communities; however, nationally, most migrant workers live in overcrowded, isolated, and dilapidated conditions. The absence of this significant stressor and the potential protective factor of safe and secure living were not directly assessed, although its

conceivable role should not be overlooked. Given that previous studies consistently identified poor housing conditions as a significant threat to well-being, future studies need to closely examine the impact of this contextual factor, as it may lead to lower levels of depressive symptomology and higher levels of well-being.

Furthermore, various threats to the quantitative and qualitative phases limit their explanatory power. The low internal consistency of the outcome measures limited the predictive ability of the regression analyses, potentially obfuscating our understanding of predictors of formal and total help seeking. The relatively small number of qualitative participants limits the thickness and richness of the present findings. Finally, the cross-sectional nature of this study limits its ability to explore the process of help seeking as it occurs. The study asked participants to recall previous feelings, attitudes, and behaviors related to help seeking; therefore, memory biases and demand characteristics may have influenced this recall.

Researchers today know significantly more about the mental and physical health of migrant workers than they did three decades ago. However, limitations in this current body of research curtail our ability to fully understand risk and protective factors that influence the well-being of migrant workers, as well as the types of frequency of health care services sought. These limitations are not only technical, but also involve a limited scope of exploration, such that several correlates and etiologies have yet to be examined.

### **Research Priorities and Recommendations**

Given the limitations of this research, studies should aim to address several gaps in knowledge. Research should endeavor to provide a better understanding of the relative strength of risk factors and their relationship to each other. It should enhance

understanding of how specific risk factors change over time in response to the developmental and situational demands of migration and migrant work. Research must elucidate risk factors at the individual level. Additionally, researchers should assess the applicability of known risk factors across different groups of Latina/o migrant workers (e.g., different streams, different native countries); however, research aimed at identifying preventative factors is also essential. Finally, researchers should seek to improve the reliability and validity of research instruments with this population, particularly those related to risk and protective factors and treatment seeking behaviors.

Determining the cumulative effects of protective and risk factors and disentangling their complex relations is a significant, yet imperative, challenge. A clearer understanding of the health of Latina/o migrant workers will require national studies of multivariate explanations of differential health outcomes. Current researchers are helping to unearth this knowledge, as the field is still establishing mental and physical health prevalence and incidence rates while simultaneously gaining a more contextualized understanding of factors at different ecological levels.

**Clinical call to action.** Migrant workers face looming socio-political challenges to accessing, utilizing, and following through on their care. The current Patient Portability and Affordable Care Act fails to include most migrant workers because of their undocumented status (Holmes, 2011, 2012). Concurrently, immigration reform discussions about a possible W (work) Visa are unlikely to positively impact the health status of migrant workers (Nandi et al., 2011). Finally, the Migrant and Community Health Centers lack an infrastructure sufficient enough to provide necessary federal services (López-Cevallos, Lee, & Donlan, 2013). In the face of these challenges,

healthcare providers – especially psychologists – are positioned to enter into a transformative service delivery role.

Several themes arise in the examination of migrants' access to and utilization of health care and fall within psychologists' sphere of expertise. Psychologists can use their awareness of cultural sensitivity to inform provider-patient interactions and systems policies. For example, this can manifest in ensuring office hours meet workers' availability, including family members appropriately in health care decision-making, diminishing provider-patient power differentials, identifying and working with patients' cultural beliefs about the etiology and treatment of illnesses, addressing broader social service needs, and helping the treatment team understand how all of these factors influence symptom presentation and treatment. Furthermore, psychologists can work to ensure that education materials are culturally-appropriate, with attention to not only language and reading level, but also to how topics are framed. Finally, within direct clinical service, psychologists can model how to engage migrant workers and their families in a manner that builds upon their resilience factors and builds meaningful rapport.

The American Psychological Association's "Guidelines on Multicultural Training, Research, Practice, and Organizational Change for Psychologists" call on psychologists to use organizational change processes to support culturally informed organizational development and practices (American Psychological Association, 2002). This has implications for psychologists' role as agents of change that address local and national health care policy in order to ameliorate health disparities. Psychologists can utilize several innovative initiatives to help them enact larger systems change. For

example, psychologists can expand the availability of health services via university/hospital-community partnerships. These partnerships will also serve the function of training future psychologists, doctors, nurses, social workers, and educators on the social determinants of well-being and methods of culturally-sensitive service provision to migrant workers. Use of mobile healthcare units and telehealth services can help to reduce barriers to access, while the use of *promotores/as* (community health workers) has been found to increase healthcare engagement and the effectiveness of interventions (J. Grzywacz et al., 2013; Persichino & Ibarra, 2012; S. Quandt et al., 2013).

**Conclusion.** Within research and practice, a clear need for increased attention toward and understanding of migrant workers exists. The silent perseverance of these individuals surfaces in the bounty of food available to us in grocery stores and carried into our homes, yet their strengths and challenges are seen by few. Psychologists' voices on issues faced by migrant workers have largely remained silent, although we have a unique potential to work toward social justice within migrant worker communities.

To access additional information and resources about migrant workers, please visit the following organizations: Migrant Clinicians Network:

<http://migrantclinician.org>; National Center for Farmworker Health: <http://ncfh.org>;

Health Outreach Partners: <http://outreach-partners.org>; Migrant Health Promotion:

<http://migranthealth.org>; and the HRSA Bureau of Primary Health Care, Office of

Minority Health and Special Populations: <http://bphc.hrsa.gov/>

[about/specialpopulations.htm](http://bphc.hrsa.gov/about/specialpopulations.htm).

## Notes

1. Previous literature uses several terms to describe individuals engaged in migrant farmwork. Therefore, the current study uses the terms migrant worker and migrant farmworker interchangeably.
2. The literature often uses the term Latina/o interchangeably with Hispanic to describe approximately the same set of people, although their sociopolitical origins differ. Because Latina/o has been preferred as more inclusive and politically progressive (Comas-Díaz, 2001; Santiago-Rivera, Arredondo, & Gallardo-Cooper, 2002), we use this term.
3. The United States Immigration and Naturalization Service (INS) uses the term “illegal alien” to describe an individual who is categorized as a criminal due to their violation of U.S. Immigration law. Throughout this paper, the more neutral terminology, “undocumented immigrant,” is employed.
4. As expanded upon in the quantitative discussion section, the current study’s sample differs from that of the national population and samples in prior research in regard to several demographic characteristics (e.g., education level, gender, nativity).

## Appendix A: Qualitative Research Guide

### Outline for Focus Group at the office of ECA/enFAMiLIA

1. Introduction (30 minutes)
2. Talk/Focus Group Discussion (1 hour)
3. Desert and ending (15 minutes)

#### 1. *Introduction*

- The purpose of this research study is to understand and improve migrant workers' ability to look for help for mental health problems. My name is \_\_\_\_\_ and she is \_\_\_\_\_. We are students at the University of Miami and we also work with enFAMiLIA. This discussion will be focused on the same topics talked about in the questionnaires that you previously filled out. It will also include discussions about the stress, perceptions of mental illness and well-being, and help available in the community. Finally, we will take everyone's ideas and we will think of ways to make changes that will benefit the community.
- Explain activities:
  - Food
  - Read informed consent
  - Talk
  - Dessert
- Read informed consent form to group. See if they have any questions. Have them sign and the facilitator will sign as well. Keep a form for our records (put it in folder) and leave them with a copy.
- Explain "name tags." Each one can choose the name (pseudonym) that they would like to use during the talk. (Give them name tags so they can think of the name during the dinner). Explain that this is an additional step to protecting confidentiality because the recordings will not contain their real names.
- Dinner

#### 2. *Talk/Focus Group Discussion*

- Explain the "Rules of the Talk"
  - A. What is said here stays here. We have to respect your privacy, which is why no one's name will be included in any recordings or report of the findings. For this reason also, each one has chosen a different name. We ask you that when you want to speak to someone, say the name that you find on the "name tag" of that person.
  - B. It is important that you try to speak with complete honesty. If you do not understand a question please let us know. This will help us do a better job.
  - C. There are no correct or incorrect answers, only different opinions.
  - D. The opinion of everyone is important. We want to hear what each of you have to say. The more different ideas discuss here, the easier it will be for us to start to address those problems.
  - D. Only one person talks at a time. Because everything that each one of you has to say is extremely important, we need to hear your ideas clearly. One of us will

take notes with the computer during the talk so that we will not forget anything that you say.

- We hope that you feel comfortable sharing your ideas with us but please let us know if you need to leave the talk at any time.
- Please put your cell phone on silent or vibrate.
- Begin the group by apologizing a few times for cutting people off, explaining that this is going to be a great conversation but we will need more time than what we have together. Therefore, we need to move from topic to topic. When it comes time to cut someone off, say “I’m so sorry, it’s so important to hear what you have to say, maybe we can talk after this discussion.”
- **Focus Group Questions**
  1. What are things you/your family/families in your community do to feel good and connected to family, friends, and loved ones?
  2. What terms are used in your community to describe emotional pains, stress, nervios (e.g., *ataque de nervios, bilis o colera, mal de ojo, nervios, susto, espanto, perdida de alma, corriente de aire, saladerra*)?
  3. What do you think are the main stressors experienced by people in this community?
  4. What do you think causes these problems?
    - a. When do they tend to happen?
    - b. What is the impact of these problems, distress, or illnesses?
  5. What kinds of treatments or strategies fix or heal these problems?
    - a. Where are other places people in the community could go for help?
    - b. *Curanderismo, espiritismo (buscando la causa), Santeria, santerismo*?
  6. What makes it difficult to seek help for these problems?
    - a. What makes it easier to seek help for these problems?
  7. What could services in the community do to help with these problems?
  8. What does it mean to be healthy and/or have mental health?
    - a. What or whom do you call on for strength?
  9. As an outsider of this community, I do not know all of the important questions to ask. Is there anything else important to know that could help me better understand your community?

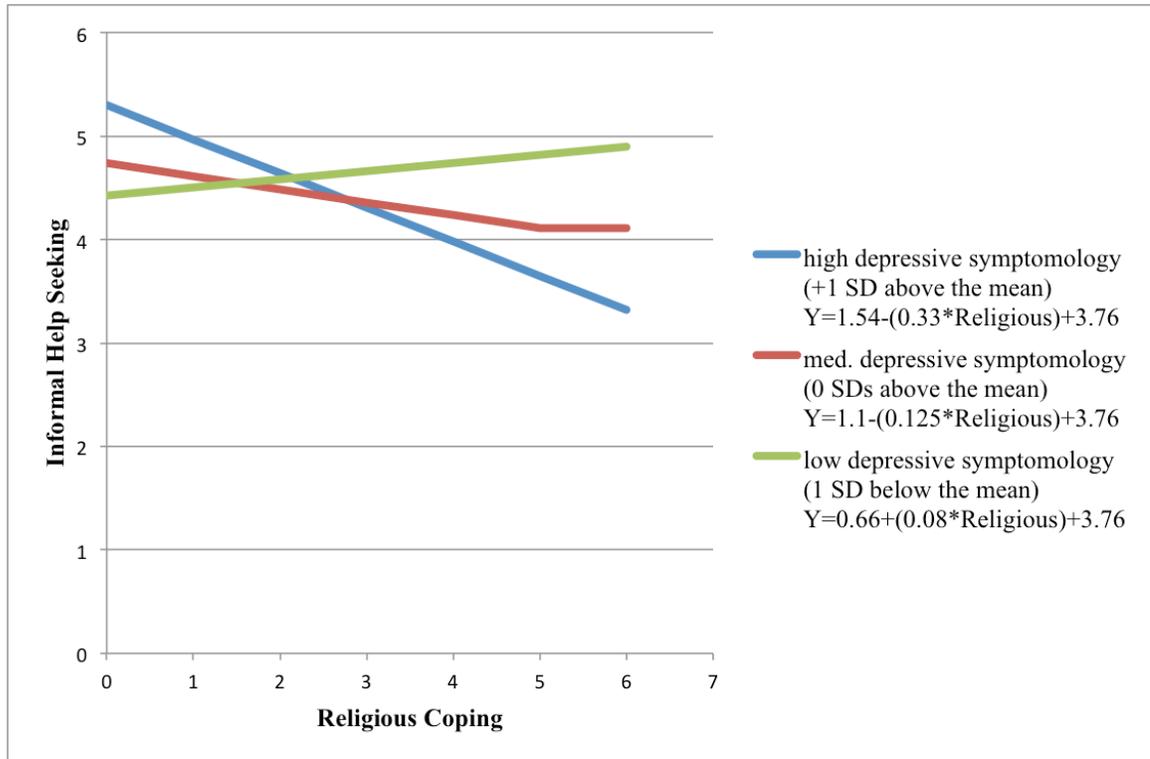
### 3. Closing

- Serve dessert, thanking participants for contributing their voice
- Encourage participants to
- Explain the plan to combine these results with other focus group discussions (emphasizing confidentiality) with the goal to use the results to improve their community

## Figures

Figure 1

*Depressive Symptomology Moderates the Effect of Religious Coping on Informal Help Seeking*



## Tables

Table 1

*Overview of Mental and Physical Health Problems Experienced by Migrant Workers*

<b>Health Problem</b>	<b>Findings</b>
<b>Mental Health</b>	
<i>depression</i>	<ul style="list-style-type: none"> <li>• <i>most explored mental health problem</i></li> <li>• <i>several large-scale studies</i></li> <li>• <i>higher than rates in general population in U.S. and Mexico</i></li> <li>• <i>rates range from 19.7% to 63%</i></li> <li>• <i>findings serve as cornerstone of the “immigrant paradox”</i></li> </ul>
<i>anxiety</i>	<ul style="list-style-type: none"> <li>• <i>several large-scale studies of several types of anxiety disorders</i></li> <li>• <i>higher than rates in general population in U.S. and Mexico</i></li> <li>• <i>rates range from 16% to 44%</i></li> </ul>
<i>substance use</i>	<ul style="list-style-type: none"> <li>• <i>different alcohol consumption patterns than Mexican Americans</i></li> <li>• <i>problem drinking rates may be as high as 37.6%</i></li> <li>• <i>rates of methamphetamine and cocaine use as high as 21%</i></li> </ul>
<i>other mental illnesses</i>	<ul style="list-style-type: none"> <li>• <i>higher overall lifetime prevalence rates of :</i> <ul style="list-style-type: none"> <li>○ <i>mood disorders</i></li> <li>○ <i>psychosis</i></li> <li>○ <i>somatization disorder</i></li> <li>○ <i>antisocial personality disorder</i></li> </ul> </li> </ul>
<b>Physical Health</b>	
<i>infectious diseases and sexual behaviors</i>	<ul style="list-style-type: none"> <li>• <i>elevated rates of intestinal parasites, tuberculosis, and viral/bacterial infections</i></li> <li>• <i>elevated rates of HIV/AIDS</i> <ul style="list-style-type: none"> <li>○ <i>prevalence of 1% to 5%</i></li> <li>○ <i>associated with increased rates of risky behaviors</i></li> </ul> </li> </ul>
<i>occupational injuries</i>	<ul style="list-style-type: none"> <li>• <i>most common health problem for migrant workers</i></li> <li>• <i>includes: pesticide poisoning, skin disorders, ocular disorders, musculoskeletal pain, dermatitis, and respiratory illnesses</i></li> </ul>
<i>chronic health conditions</i>	<ul style="list-style-type: none"> <li>• <i>increased rates of diabetes and decreased rates of good diabetes management</i></li> <li>• <i>significant rates of obesity, high cholesterol, and elevated blood pressure</i></li> </ul>
<i>maternal and child health</i>	<ul style="list-style-type: none"> <li>• <i>many women do not meet targets for weight gain during pregnancy or prenatal service use</i></li> <li>• <i>children face increased rates of under-immunization, Hepatitis A, iron deficiencies, and dental care</i></li> </ul>

Table 2

*Summary of Risk and Protective Health Factors Using the Developmental Systems Theory*

	<b>Individual Level</b>	<b>Communal Level</b>	<b>Contextual Level</b>
<b>Risk Factors</b>	<ul style="list-style-type: none"> <li>• increased age</li> <li>• higher levels of acculturation</li> <li>• avoidant coping</li> </ul>	<ul style="list-style-type: none"> <li>• perceptions of illness and health beliefs</li> </ul>	<ul style="list-style-type: none"> <li>• migration process</li> <li>• pesticide exposure</li> <li>• crowded, geographically isolated, unsanitary living conditions</li> <li>• discrimination</li> <li>• lack of health insurance</li> <li>• undocumented status</li> <li>• low educational attainment</li> </ul>
<b>Protective Factors</b>	<ul style="list-style-type: none"> <li>• lower levels of acculturation/</li> <li>• higher levels of enculturation</li> <li>• active coping</li> <li>• use of culturally-specific coping mechanisms</li> <li>• self-efficacy</li> <li>• social support</li> </ul>	<ul style="list-style-type: none"> <li>• perceptions of illness and health beliefs</li> <li>• use of traditional healing practices</li> </ul>	<ul style="list-style-type: none"> <li>• being located closer to friends and family</li> </ul>

Table 3

*Quantitative Participant Characteristics*

Characteristic	Mean <sup>a</sup>	Percentage <sup>b</sup>
Age	35.33 (9.98)	
Female		77
Married/cohabitating		74
Had children		75
Education level completed		
None		4
8 <sup>th</sup> grade or less		23
Some or all of high school		33
Technical degree		31
Income level per month		
\$499 or less		22
\$500 - \$999		56
\$1000 or more		22
Nativity		
Mexico		64
Guatemala		20
El Salvador		14
Cuba		1
Peru		1
Language preference		
Spanish		75
English		15
Both		6
Indigenous language		4
Influence of religion on life		
A lot		68
A little		25
None		2

<sup>a</sup>The standard deviation is presented in parentheses next to the mean.

<sup>b</sup>Represents the percentage of the sample.

Table 4

*Correlations Between Predictors and Outcome Variables*

	Gender	AOS	MOS	Religious	Emo.	Active	CES-D	ATSPH	IHS	FHS	THS
Gender	1.00	.07	-.11	.03	-.12	-.01	.22*	.19*	.04	.09	.05
AOS <sup>a</sup>	.07	1.00	-.48**	-.05	.22*	.09	-.01	.13	.21*	-.16	.01
MOS <sup>b</sup>	-.11	-.48**	1.00	.10	-.01	.11	-.08	-.17	.08	.08	.13
Religious	.03	-.05	.10	1.00	.51**	.46**	.39**	-.28**	.20*	-.01	.09
Emo. <sup>c</sup>	-.12	.22*	-.01	.51**	1.00	.50**	.27**	-.20*	.48**	.03	.26*
Active <sup>d</sup>	-.01	.09	.11	.46**	.50**	1.00	.33**	-.28**	.23*	-.03	.12
CES-D <sup>e</sup>	.22*	-.01	-.08	.39**	.27**	.33**	1.00	.06	.19*	.10	.16
ATSPH <sup>f</sup>	.19*	.13	-.17	-.28**	-.20*	-.28**	.06	1.00	-.16 <sup>†</sup>	-.10	-.07
IHS <sup>g</sup>	.04	.21*	.08	.20*	.48**	.23*	.19*	-.16 <sup>†</sup>	1.00	.31**	.75**
FHS <sup>h</sup>	.09	-.16	.08	-.01	.03	-.03	.10	-.10	.31**	1.00	.79**
THS <sup>i</sup>	.05	.01	.13	.09	.26*	.12	.16	-.07	.75**	.79**	1.00

<sup>a</sup>AOS refers to the Anglo Orientation Scale of the ARSMA-II and measures acculturation. <sup>b</sup>MOS refers to the Mexican Orientation Scale of the ARSMA-II and measures enculturation. <sup>c</sup>Emo. refers to the Using Emotional Support subscale of the Brief COPE. <sup>d</sup>Active refers to the Active Coping subscale of the Brief COPE. <sup>e</sup>CES-D measures depressive symptomology. <sup>f</sup>ATSPH refers to the Attitudes Toward Seeking Professional Help scale. <sup>g</sup>IHS refers to informal help seeking. <sup>h</sup>FHS refers to formal help seeking. <sup>i</sup>THS refers to total help seeking.

<sup>†</sup> $p < .10$ , \* $p < .05$ , \*\* $p < .001$ .

Table 5

*Hierarchical Multiple Regression Predictors of Informal Help Seeking*

Model	$R^2$	Adj. $R^2$	$\Delta R^2$	df1	df2	$\Delta F$	df1	df2	$F$
1 <sup>a</sup>	.002	-.01	-	-	-	-	1	92	.16
2 <sup>b</sup>	.09	.06	.08	2	90	4.12*	3	90	2.80*
3 <sup>c</sup>	.30	.23	.21	5	85	5.21**	8	85	4.55**
4 <sup>d</sup>	.33	.26	.03	1	84	3.95*	9	84	4.63**

<sup>a</sup>Block 1 included gender. <sup>b</sup>Block 2 included gender, acculturation, and enculturation.

<sup>c</sup>Block 3 included gender, acculturation, and enculturation, depressive symptomology, active coping, using emotional support to cope, and religious coping. <sup>d</sup>Block 4 included gender, acculturation, and enculturation, depressive symptomology, active coping, using emotional support to cope, religious coping, and an interaction term (depressive symptomology\*religious coping).

\* $p < .05$ , \*\* $p < .001$ .

Table 6

*Informal Help Seeking Hierarchical Multiple Regression Standardized Coefficients for Block 4*

	b	SE	$\beta$	t
Gender	.37	.38	.09	.97
Acculturation	.34	.19	.20	.08 <sup>†</sup>
Enculturation	.49	.31	.17	1.56
Religious Coping	-.13	.10	-.16	-1.30
Using Emotional Support to Cope	.39	.10	.46	3.92**
Active Coping	-.09	.11	-.09	-.80
Depressive Symptomology	.09	.04	.27	2.10*
Attitudes Toward Seeking Professional Help	-.03	.02	-.17	-1.73 <sup>†</sup>
Religious Coping*Depressive Symptomology	-.4	.02	-.22	-1.99*

<sup>†</sup> $p < .10$ , \* $p < .05$ , \*\* $p < .001$ .

Table 7

*Hierarchical Multiple Regression Predictors of Formal Help Seeking*

Model	$R^2$	Adj. $R^2$	$\Delta R^2$	df1	df2	$\Delta F$	df1	df2	$F$
1 <sup>a</sup>	.01	-.02	-	-	-	-	1	92	.82
2 <sup>b</sup>	.04	.01	.03	2	90	1.45	3	90	1.24
3 <sup>c</sup>	.07	-.02	.03	5	85	.60	8	85	.83
4 <sup>d</sup>	.11	.01	.03	1	84	3.22 <sup>†</sup>	9	84	1.17

<sup>a</sup>Block 1 included gender. <sup>b</sup>Block 2 included gender, acculturation, and enculturation.

<sup>c</sup>Block 3 included gender, acculturation, and enculturation, depressive symptomology, active coping, using emotional support to cope, and religious coping. <sup>d</sup>Block 4 included gender, acculturation, and enculturation, depressive symptomology, active coping, using emotional support to cope, religious coping, and an interaction term (depressive symptomology\*religious coping).

<sup>†</sup> $p < .10$ , \* $p < .05$ , \*\* $p < .001$ .

Table 8

*Formal Help Seeking Hierarchical Multiple Regression Standardized Coefficients for Block 4*

	b	SE	$\beta$	t
Gender	.37	.38	1.06	.96
Acculturation	-.30	.19	-.20	-1.60
Enculturation	-.05	.32	-.02	-.14
Religious Coping	-.14	.10	-.20	-1.43
Using Emotional Support to Cope	.09	.10	.12	.87
Active Coping	-.11	.11	-.13	-1.02
Depressive Symptomology	.08	.04	.28	1.88 <sup>†</sup>
Attitudes Toward Seeking Professional Help	-.02	.02	-.15	1.28
Religious Coping*Depressive Symptomology	-.04	.02	-.23	-1.80 <sup>†</sup>

<sup>†</sup> $p < .10$ , \* $p < .05$ , \*\* $p < .001$ .

Table 9

*Hierarchical Multiple Regression Predictors of Total Help Seeking*

Model	$R^2$	Adj. $R^2$	$\Delta R^2$	df1	df2	$\Delta F$	df1	df2	$F$
1 <sup>a</sup>	<.01	-.01	-	-	-	-	1	92	.26
2 <sup>b</sup>	.03	-.01	.02	2	90	1.04	3	90	.78
3 <sup>c</sup>	.11	.02	.08	5	85	1.53	8	85	1.26
4 <sup>d</sup>	.15	.06	.05	1	84	4.71*	9	84	1.69

<sup>a</sup>Block 1 included gender. <sup>b</sup>Block 2 included gender, acculturation, and enculturation.

<sup>c</sup>Block 3 included gender, acculturation, and enculturation, depressive symptomology, active coping, using emotional support to cope, and religious coping. <sup>d</sup>Block 4 included gender, acculturation, and enculturation, depressive symptomology, active coping, using emotional support to cope, religious coping, and an interaction term (depressive symptomology\*religious coping).

\* $p < .05$ , \*\* $p < .001$ .

Table 10

*Total Help Seeking Hierarchical Multiple Regression Standardized Coefficients for Block 4*

	b	SE	$\beta$	t
Gender	.43	.69	.07	.62
Acculturation	.01	.34	.01	.02
Enculturation	.59	.57	.12	1.03
Religious Coping	-.26	.17	-.20	-1.48
Using Emotional Support to Cope	.38	.18	.28	2.13*
Active Coping	-.14	.19	-.09	-.74
Depressive Symptomology	.17	.08	.32	2.26*
Attitudes Toward Seeking Professional Help	-.02	.03	-.08	-.73
Religious Coping*Depressive Symptomology	-.08	.04	-.28	-2.17*

† $p < .10$ , \* $p < .05$ , \*\* $p < .001$ .

Table 11

*Portrayal of the First Qualitative Theme, Children as a Point of Connection*

<b>Children as a Point of Connection</b>				
<b>Importance of children</b>	<b>Importance of being active</b>	<b>Hope for the future</b>	<b>Education</b>	<b>Acculturation</b>
related to interactions, behavior, thoughts, and attitudes about children	related to role of engaging in activities	related to wishes, beliefs, and dreams	related to formal education, interactions with educational entities, and informal education (e.g., knowledge about certain topics)	related to attitudes, beliefs, and behaviors about one's native country and the receiving country (U.S.)

*Note.* Delineates the theme, then specific codes that comprise the theme, followed by the operationalized definitions of each code.

Table 12

*Portrayal of the Second Qualitative Theme, Mosaic of Informal Support*

<b>Mosaic of Informal Support</b>		
<b>Importance family</b>	<b>Role of community/neighbors/friends</b>	<b>Role of religion/faith</b>
related to attitudes, beliefs, and behaviors within and between families	related to attitudes, beliefs, and behaviors within and between the community/friends/neighbors	related to spiritual beliefs, practices, and attitudes

*Note.* Delineates the theme, then specific codes that comprise the theme, followed by the operationalized definitions of each code.

Table 13

*Portrayal of the Third Qualitative Theme, Navigating a Multi-Stressed Life Context*

<b>Navigating a Multi-stressed Life Context</b>			
<b>State of the economy</b>	<b>Struggles with transportation</b>	<b>Interactions with police</b>	<b>Impact of documentation status</b>
related to financial stressors, workforce patterns, and the impact of these elements on families and the community	related to the availability and amenability of transportation in the community and how this impacts other facets of life	related to actual or possible interactions with the police and/or legal authorities; may be thoughts, feelings, or behaviors	related to having or not having legal status in the U.S. and how this status influences access to rights and services

*Note.* Delineates the theme, then specific codes that comprise the theme, followed by the operationalized definitions of each code.

Table 14

*Portrayal of the Fourth Qualitative Theme, Awareness of Lack of Agency*

<b>Awareness of Lack of Agency</b>			
<b>Immigration</b>	<b>Nature of work</b>	<b>Fear</b>	<b>Lack of power</b>
related to the process of moving, such as to come to the U.S., within the U.S., and to the native country	related to occupational stressors, occupational identity, and the impact of migrant work on individuals and families	related to the feeling of fear or related feelings such as high level of worrying and/or anxiety	related to perceptions and experiences of lacking the ability to influence changes in one's life or the systems in which one interacts

*Note.* Delineates the theme, then specific codes that comprise the theme, followed by the operationalized definitions of each code.

Table 15

*Portrayal of the Fifth Qualitative Theme, Toward the Promotion of Well-Being*

<b>Toward the Promotion of Well-Being</b>		
<b>Components of mental health</b>	<b>Components of physical health</b>	<b>Sufficiency of services</b>
related to symptoms, beliefs, and correlates of mental health	related to symptoms, beliefs, and correlates of physical health	related to perceptions of, interactions with, and availability of social and healthcare services

*Note.* Delineates the theme, then specific codes that comprise the theme, followed by the operationalized definitions of each code.

## References

- Abraído-Lanza, A. F., Vásquez, E., & Echeverría, S. E. (2004). En las manos de Dios [in God's hands]: Religious and other forms of coping among Latinos with arthritis. *Journal of Consulting and Clinical Psychology, 72*(1), 91-102. doi: 10.1037/0022-006x.72.1.91
- Alaniz, M. L. (2002). Migration, acculturation, displacement: Migratory workers and 'substance abuse'. *Substance Use & Misuse, 37*(8-10), 1253-1257. doi: 10.1081/ja-120004182
- Albarrán, C. R., & Nyamathi, A. (2011). HIV and Mexican migrant workers in the United States: A review applying the vulnerable populations conceptual model. *JANAC: Journal of the Association of Nurses in AIDS Care, 22*(3), 173-185. doi: 10.1016/j.jana.2010.08.001
- Alderete, E., Vega, W. A., Kolody, B., & Aguilar-Gaxiola, S. (1999). Depressive symptomatology: Prevalence and psychosocial risk factors among Mexican migrant farmworkers in California. *Journal of Community Psychology, 27*(4), 457-471. doi: 10.1002/(sici)1520-6629(199907)27:4<457::aid-jcop7>3.0.co;2-d
- Alderete, E., Vega, W. A., Kolody, B., & Aguilar-Gaxiola, S. (2000). Lifetime prevalence of and risk factors for psychiatric disorders among Mexican migrant farmworkers in California. *American Journal of Public Health, 90*(4), 608-614.
- Alegria, D., Guerra, E., Martinez, C., & Meyer, G. G. (1977). El hospital invisible: A study of curanderismo. *Archives of General Psychiatry, 34*(11), 1354-1357.
- Alegria, M., Canino, G., Shrout, P. E., Woo, M., Duan, N., Vila, D., . . . Meng, X.-L. (2008). Prevalence of mental illness in immigrant and non-immigrant U.S. Latino groups. *The American Journal of Psychiatry, 165*(3), 359-369. doi: 10.1176/appi.ajp.2007.07040704
- American Psychological Association. (2002, January 19, 2011). Guidelines on multicultural education, training, research, practice, and organizational change for psychologists
- Anthony, M., Martin, E., Avery, A., & Williams, J. (2010). Self care and health-seeking behavior of migrant farmworkers. *Journal of Immigrant and Minority Health, 12*(5), 634-639. doi: 10.1007/s10903-009-9252-9
- Apostolopoulos, Y., Sonmez, S., Kronenfeld, J., Castillo, E., McLendon, L., & Smith, D. (2006). STI/HIV risks for Mexican migrant laborers: Exploratory ethnographies. *Journal of Immigrant and Minority Health, 8*(3), 291-292. doi: 10.1007/s10903-006-9334-2

- Aranda, M. P., Castaneda, I., Lee, P.-J., & Sobel, E. (2001). Stress, social support and coping as predictors of depressive symptoms: Gender differences among Mexican Americans. *Social Work Research, 25*(1), 37-48.
- Arbona, C., Olvera, N., Rodriguez, N., Hagan, J., Linares, A., & Wiesner, M. (2010). Acculturative stress among documented and undocumented Latino immigrants in the United States. *Hispanic Journal of Behavioral Sciences, 32*(3), 362-384. doi: 10.1177/0739986310373210
- Arcury, T., O'Hara, H., Grzywacz, J., Isom, S., Chen, H., & Quandt, S. (2012). Work safety climate, musculoskeletal discomfort, working while injured, and depression among migrant farmworkers in North Carolina. *American Journal of Public Health, 102*(S2), S272-S278.
- Arcury, T. A., & Quandt, S. A. (2007). Delivery of health services to migrant and seasonal farmworkers. *Annual Review of Public Health, 28*, 345-363. doi: 10.1146/annurev.publhealth.27.021405.102106
- Arenas, S., Cross, H., & Willard, W. (1980). Curanderos and mental health professionals: A comparative study on perceptions of psychopathology. *Hispanic Journal of Behavioral Sciences, 2*(4), 407-421. doi: 10.1177/073998638000200408
- Baer, R. D. (1996). Health and mental health among Mexican American immigrants: Implications for survey research. *Human Organization, 55*(1), 58-66.
- Baer, R. D., & Penzell, D. (1993). Research report: Susto and pesticide poisoning among Florida farmworkers. *Culture, Medicine and Psychiatry, 17*(3), 321-327. doi: 10.1007/bf01380007
- Bauer, S., & Kantayya, V. S. (2010). Improving access to primary care and health outcomes in migrant farm worker populations: Challenges and opportunities. *Disease-a-Month, 56*(12), 706-718. doi: <http://dx.doi.org/10.1016/j.disamonth.2010.10.004>
- Borges, G., Breslau, J., Orozco, R., Tancredi, D. J., Anderson, H., Aguilar-Gaxiola, S., & Medina Mora, M.-E. (2011). A cross-national study on Mexico-US migration, substance use and substance use disorders. *Drug and Alcohol Dependence, 117*(1), 16-23. doi: 10.1016/j.drugalcdep.2010.12.022
- Borges, G., Medina-Mora, M.-E., Orozco, R., Fleiz, C., Cherpitel, C., & Breslau, J. (2009). The Mexican migration to the United States and substance use in northern Mexico. *Addiction, 104*(4), 603-611. doi: 10.1111/j.1360-0443.2008.02491.x

- Borges, G., Medina-Mora, M. E., Breslau, J., & Aguilar-Gaxiola, S. (2007). The effect of migration to the United States on substance use disorders among returned Mexican migrants and families of migrants. *American Journal of Public Health, 97*(10), 1847-1851. doi: 10.2105/ajph.2006.097915
- Borre, K., Ertle, L., & Graff, M. (2010). Working to eat: Vulnerability, food insecurity, and obesity among migrant and seasonal farmworker families. *American Journal of Industrial Medicine, 53*(4), 443-462. doi: 10.1002/ajim.20836
- Breslau, J., Borges, G., Tancredi, D., Saito, N., Kravitz, R., Hinton, L., . . . Aguilar-Gaxiola, S. (2011). Migration from Mexico to the United States and subsequent risk for depressive and anxiety disorders: A cross-national study. *Archives of General Psychiatry, 68*(4), 428-433. doi: 10.1001/archgenpsychiatry.2011.21
- Bureau, U. S. C. (2010). State & Country Quick Facts Retrieved August 8, 2013, 2013, from <http://quickfacts.census.gov/qfd/states/12/1232275.html>
- Burnam, M. A., Hough, R. L., Karno, M., & Escobar, J. I. (1987). Acculturation and lifetime prevalence of psychiatric disorders among Mexican Americans in Los Angeles. *Journal of Health and Social Behavior, 28*(1), 89-102. doi: 10.2307/2137143
- Caballero-Hoyos, R., Torres-Lopez, T., Pineda-Lucatero, A., Navarro-Nuñez, C., Fosados, R., & Valente, T. (2008). Between tradition and change: Condom use with primary sexual partners among Mexican migrants. *AIDS and Behavior, 12*(4), 561-569. doi: 10.1007/s10461-008-9385-1
- Cabassa, L. J. (2003). Measuring Acculturation: Where we are and where we need to go. *Hispanic Journal of Behavioral Sciences, 25*(2), 127-146.
- Campesino, M., & Schwartz, G. E. (2006). Spirituality among Latinas/os: Implications of culture in conceptualization and measurement. *Advances in Nursing Science, 29*(1), 69-81.
- Caplan, S. (2007). Latinos, acculturation, and acculturative stress: A dimensional concept analysis. *Policy, Politics, & Nursing Practice, 8*(2), 93-106. doi: 10.1177/1527154407301751
- Carver, C. S. (1997). You want to measure coping but your protocol's too long: Consider the Brief COPE. *International Journal of Behavioral Medicine, 4*(1), 92-100. doi: 10.1207/s15327558ijbm0401\_6
- Cervantes, J. M., Mejía, O. L., & Guerrero Mena, A. (2010). Serial migration and the assessment of extreme and unusual psychological hardship with undocumented Latina/o families. *Hispanic Journal of Behavioral Sciences, 32*(2), 275-291. doi: 10.1177/0739986310366286

- Chávez, M. L., Wampler, B., & Burkhart, R. E. (2006). Left out: Trust and social capital among migrant seasonal farmworkers. *Social Science Quarterly*, *87*(5), 1012-1029. doi: 10.1111/j.1540-6237.2006.00413.x
- Chávez, S. (2011). Navigating the US-Mexico border: The crossing strategies of undocumented workers in Tijuana, Mexico. *Ethnic and Racial Studies*, *34*(8), 1320-1337. doi: 10.1080/01419870.2010.547586
- Chen, J., & Vargas-Bustamante, A. (2011). Estimating the effects of immigration status on mental health care utilizations in the United States. *Journal of Immigrant and Minority Health*, *13*(4), 671-680. doi: 10.1007/s10903-011-9445-x
- Cleaveland, C. (2010). 'We are not criminals': Social work advocacy and unauthorized migrants. *Social Work*, *55*(1), 74-81.
- Clingerman, E. M., & Brown, A. (2012). Stress in migrant farmworkers during premigration. *Biological Research For Nursing*, *14*(1), 27-37. doi: 10.1177/1099800410396703
- Connor, A., Layne, L., & Thomisee, K. (2010). Providing care for migrant farm worker families in their unique sociocultural context and environment. *Journal of Transcultural Nursing*, *21*(2), 159-166. doi: 10.1177/1043659609357631
- Crain, R., Grzywacz, J., Schwantes, M., Isom, S., Quandt, S., & Arcury, T. (2012). Correlates of mental health among Latino farmworkers in North Carolina. *Journal of Rural Health*, *28*(277-285).
- Crockett, L. J., Iturbide, M. I., Torres Stone, R. A., McGinley, M., Raffaelli, M., & Carlo, G. (2007). Acculturative stress, social support, and coping: Relations to psychological adjustment among Mexican American college students. *Cultural Diversity and Ethnic Minority Psychology*, *13*(4), 347-355. doi: 10.1037/1099-9809.13.4.347
- Cuellar, I., Arnold, B., & Maldonado, R. (1995). Acculturation rating scale for Mexican Americans-II: A revision of the original ARSMA Scale. *Hispanic Journal of Behavioral Sciences*, *17*(3), 275-304. doi: 10.1177/07399863950173001
- de Oca, V. M., García, T. R., Sáenz, R., & Guillén, J. (2011). The linkage of life course, migration, health, and aging: Health in adults and elderly Mexican migrants. *Journal of Aging and Health*, *23*(7), 1116-1140. doi: 10.1177/0898264311422099
- de Snyder, V. N. S., Acevedo, A., Díaz-Pérez, M. d. J., & Saldívar-Garduño, A. (2000). Understanding the sexuality of Mexican-born women and their risk for HIV/AIDS. *Psychology of Women Quarterly*, *24*(1), 100-109. doi: 10.1111/j.1471-6402.2000.tb01026.x

- Denner, J., Organista, K. C., Dupree, J. D., & Thrush, G. (2005). Predictors of HIV transmission among migrant and marginally housed Latinos. *AIDS and Behavior*, 9(2), 201-210. doi: 10.1007/s10461-005-3901-3
- Duke, M. R., & Carpinteiro, F. J. G. (2009). The effects of problem drinking and sexual risk among Mexican migrant workers on their community of origin. *Human Organization*, 68(3), 328-339.
- Espinosa, A. D., & Menotti, I. S. (2009). Identificando patrones de apoyo social en población migrante mediante el análisis de escalograma de orden parcial. *Revista Interamericana de Psicología*, 43(1), 114-124.
- Familiar, I., Borges, G., Orozco, R., & Medina-Mora, M.-E. (2011). Mexican migration experiences to the US and risk for anxiety and depressive symptoms. *Journal of Affective Disorders*, 130(1-2), 83-91. doi: 10.1016/j.jad.2010.09.025
- Finch, B. K., Catalano, R. C., Novaco, R. W., & Vega, W. A. (2003). Employment frustration and alcohol abuse/dependence among labor migrants in California. *Journal of Immigrant Health*, 5(4), 181-186. doi: 10.1023/a:1026119226083
- Fitzgerald, D. (2001). Negotiating citizenship: The role of migrant-sponsored public projects in Mexican transnational politics. *Journal of Social Work Research and Evaluation*, 2(2), 251-265.
- Fitzgerald, D. (2004). Beyond 'transnationalism': Mexican hometown politics at an American labour union. *Ethnic and Racial Studies*, 27(2), 228-247. doi: 10.1080/0141987042000177315
- Flocks, J., Kelly, M., Economos, J., & McCauley, L. (2012). Female farmworkers' perceptions of pesticide exposure and pregnancy health. *Journal of Immigrant and Minority Health*, 14(626-632).
- Ford, D. H., & Lerner, R. M. (1992). *Developmental systems theory: An integrative approach*. Thousand Oaks, CA US: Sage Publications, Inc.
- Franzini, L., & Fernandez-Esquer, M. E. (2004). Socioeconomic, cultural, and personal influences on health outcomes in low income Mexican-origin individuals in Texas. *Social Science & Medicine*, 59(8), 1629-1646. doi: 10.1016/j.socscimed.2004.02.014
- Gafner, G., & Duckett, S. (1992). Treating the sequelae of a curse in elderly Mexican-Americans. *Clinical Gerontologist: The Journal of Aging and Mental Health*, 11(3-4), 145-153. doi: 10.1300/J018v11n03\_11

- Garcia, V. (2007). Meeting a binational research challenge: Substance abuse among transnational Mexican farmworkers in the United States. *The Journal of Rural Health, 23*(Suppl1), 61-67. doi: 10.1111/j.1748-0361.2007.00125.x
- García, V. (2008). Problem drinking among transnational Mexican migrants: Exploring migrant status and situational factors. *Human Organization, 67*(1), 12-24.
- García, V., & Gondolf, E. (2004). Transnational Mexican farmworkers and problem drinking: A review of the literature. *Contemporary Drug Problems: An Interdisciplinary Quarterly, 31*(1), 129-161.
- Gaviria, M., Stern, G., & Schensul, S. L. (1982). Sociocultural factors and perinatal health in a Mexican-American community. *Journal of the National Medical Association, 74*(10), 983-989.
- Gentsch, K., & Massey, D. S. (2011). Labor market outcomes for legal Mexican immigrants under the new regime of immigration enforcement. *Social Science Quarterly, 92*(3), 875-893. doi: 10.1111/j.1540-6237.2011.00795.x
- Gillin, J. (1956). The making of a witch doctor. *Psychiatry: Journal for the Study of Interpersonal Processes, 19*, 131-136.
- Glass-Coffin, B. (1991). Discourse, daño, and healing in north coastal Peru. *Medical Anthropology, 13*(1-2), 33-55.
- Grzywacz, J., Arcury, T., Talton, J., D'Agostino, R., Trejo, G., Mirabelli, M., & Quandt, S. (2013). "Causes" of pesticide safety behavior change in Latino farmworker families. *American Journal of Health Behavior, 37*(4), 449-457. doi: <http://dx.doi.org/10.5993/AJHB.37.4.3>
- Grzywacz, J., Quandt, S., Early, J., Tapia, J., Graham, C., & Arcury, T. (2006). Leaving family for work: Ambivalence and mental health among Mexican migrant farmworker men. *Journal of Immigrant and Minority Health, 8*(1), 85-97. doi: 10.1007/s10903-006-6344-7
- Grzywacz, J., Quandt, S. A., Chen, H., Isom, S., Kiang, L., Vallejos, Q., & Arcury, T. A. (2010). Depressive symptoms among Latino farmworkers across the agricultural season: Structural and situational influences. *Cultural Diversity and Ethnic Minority Psychology, 16*(3), 335-343. doi: 10.1037/a0019722
- Grzywacz, J. G., Arcury, T. A., Marín, A., Carrillo, L., Burke, B., Coates, M. L., & Quandt, S. A. (2007). Work-family conflict: Experiences and health implications among immigrant Latinos. *Journal of Applied Psychology, 92*(4), 1119-1130. doi: 10.1037/0021-9010.92.4.1119

- Grzywacz, J. G., Hovey, J. D., Seligman, L. D., Arcury, T. A., & Quandt, S. A. (2006). Evaluating short-form versions of the CES-D for measuring depressive symptoms among immigrants from Mexico. *Hispanic Journal of Behavioral Sciences, 28*(3), 404-424. doi: 10.1177/0739986306290645
- Grzywacz, J. G., Quandt, S. A., Vallejos, Q. M., Whalley, L. E., Chen, H., Isom, S., . . . Arcury, T. A. (2010). Job demands and pesticide exposure among immigrant Latino farmworkers. *Journal of Occupational Health Psychology, 15*(3), 252-266. doi: 10.1037/a0019303
- Grzywacz, J. G., Suerken, C. K., Neiberg, R. H., Lang, W., Bell, R. A., Quandt, S. A., & Arcury, T. A. (2007). Age, ethnicity, and use of complementary and alternative medicine in health self-management. *Journal of Health and Social Behavior, 48*(1), 84-98.
- Gutierrez, M., Franco, L., Gilmore Powell, K., Peterson, A., & Reid, R. (2009). Psychometric properties of the Acculturation Rating Scale for Mexican Americans -- II: exploring dimensions of marginality among a diverse Latino population. *Hispanic Journal of Behavioral Sciences, 31*, 340-356. doi: 10.1177/0739986309337821
- Hager, S. (2010). Workers and forced labor: Why including agricultural guest workers in the Migrant and Seasonal Worker Protection Act prevents human trafficking. *Syracuse Journal of International Law and Commerce Syracuse 28*.
- Hansen, E., & Donohoe, M. (2010). Health issues of migrant and seasonal farmworkers. *Journal of Health Care for the Poor and Underserved, 14*(2), 12.
- Harper, D., Babigian, H. M., Parris, R., & Mills, B. (1979). Migrant farm workers: Social conditions, adaptive belief systems, and psychiatric care. *Psychiatric Quarterly, 51*(1), 28-38. doi: 10.1007/bf01064717
- Hernández, M. T., Sanchez, M. A., Ayala, L., Magis-Rodríguez, C., Ruiz, J. D., Samuel, M. C., . . . Lemp, G. F. (2009). Methamphetamine and cocaine use among Mexican migrants in California: The California-Mexico Epidemiological Surveillance Pilot. *AIDS Education and Prevention, 21*(Suppl B), 34-44. doi: 10.1521/aeap.2009.21.5\_supp.34
- Herrera, A. P., Lee, J. W., Nanyonjo, R. D., Laufman, L. E., & Torres-Vigil, I. (2009). Religious coping and caregiver well-being in Mexican-American families. *Aging & Mental Health, 13*(1), 84-91. doi: 10.1080/13607860802154507
- Hiott, A., Grzywacz, J. G., Arcury, T. A., & Quandt, S. A. (2006). Gender differences in anxiety and depression among immigrant Latinos. *Families, Systems, & Health, 24*(2), 137-146. doi: 10.1037/1091-7527.24.2.137

- Hiott, A., Grzywacz, J. G., Davis, S. W., Quandt, S. A., & Arcury, T. A. (2008). Migrant farmworker stress: Mental health implications. *The Journal of Rural Health, 24*(1), 32-39. doi: 10.1111/j.1748-0361.2008.00134.x
- Holmes, S. M. (2011). Structural vulnerability and hierarchies of ethnicity and citizenship on the farm. *Medical Anthropology, 30*(4), 425-449. doi: 10.1080/01459740.2011.576728
- Holmes, S. M. (2012). The clinical gaze in the practice of migrant health: Mexican migrants in the United States. *Social Science & Medicine, 74*, 873-881.
- Hoogasian, R., & Lijtmaer, R. (2010). Integrating Curanderismo into counselling and psychotherapy. *Counselling Psychology Quarterly, 23*(3), 297-307. doi: 10.1080/09515070.2010.505752
- Horton, S., & Stewart, A. (2012). Reasons for self-medication and perception of risk among Mexican migrant farm workers. *Journal of Immigrant and Minority Health, 14*(664-672). doi: 10.1007/s10903-011-9562-6
- Hovey, J. D., & Magaña, C. (2000). Acculturative stress, anxiety, and depression among Mexican immigrant farmworkers in the Midwest United States. *Journal of Immigrant Health, 2*(3), 119-131. doi: 10.1023/a:1009556802759
- Hovey, J. D., & Magaña, C. G. (2002a). Cognitive, affective, and physiological expressions of anxiety symptomatology among Mexican migrant farmworkers: Predictors and generational differences. *Community Mental Health Journal, 38*(3), 223-237. doi: 10.1023/a:1015215723786
- Hovey, J. D., & Magaña, C. G. (2002b). Exploring the mental health of Mexican migrant farm workers in the Midwest: Psychosocial predictors of psychological distress and suggestions for prevention and treatment. *The Journal of Psychology, 136*(5), 493-513. doi: 10.1080/00223980209605546
- Hovey, J. D., & Magaña, C. G. (2002c). Psychosocial predictors of anxiety among immigrant Mexican migrant farmworkers: Implications for prevention and treatment. *Cultural Diversity and Ethnic Minority Psychology, 8*(3), 274-289. doi: 10.1037/1099-9809.8.3.274
- Hovey, J. D., & Magaña, C. G. (2003). Suicide risk factors among Mexican migrant farmworker women in the Midwest United States. *Archives of Suicide Research, 7*(2), 107-121. doi: 10.1080/13811110301579
- Joralemon, D. (1986). The performing patient in ritual healing. *Social Science & Medicine, 23*(9), 841-845. doi: 10.1016/0277-9536(86)90211-x

- Kandula, N., Kersey, M., & Lurie, N. (2004). Assuring the health of immigrant: What the leading health indicators tell us. *Annual Review of Public Health, 25*, 19.
- Keith, T. (2006). *Multiple Regression and Beyond*. Boston, MA: Pearson Education Inc.
- Kelly, N., Glick, D., & Kulbok, P. (2012). Health status of migrant farmworkers in the Shenandoah Valley. *Journal of Community Health Nursing, 29*, 214-224.
- Kiang, L., Grzywacz, J. G., Marín, A. J., Arcury, T. A., & Quandt, S. A. (2010). Mental health in immigrants from nontraditional receiving sites. *Cultural Diversity and Ethnic Minority Psychology, 16*(3), 386-394. doi: 10.1037/a0019907
- Krassner, M. (1986). Effective features of therapy from the healer's perspective: A study of curanderismo. *Smith College Studies in Social Work, 56*(3), 157-183. doi: 10.1080/00377318609516613
- Kreisman, J. J. (1975). The Curandero's apprentice: A therapeutic integration of folk and medical healing. *The American Journal of Psychiatry, 132*(1), 81-83.
- Lawrence, T. F., Bozzetti, L., & Kane, T. J. (1976). Curanderas: A unique role for Mexican women. *Psychiatric Annals, 6*(2), 65-73.
- Lopez-Arias, S. (2006). *Assessing the validity and reliability of the Spanish translation of two help-seeking instruments*. (66), ProQuest Information & Learning, US. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2006-99012-025&site=ehost-live> Available from EBSCOhost psyh database.
- López-Cevallos, D., Lee, J., & Donlan, W. (2013). Fear of deportation is not associated with medical or dental care use among Mexican-origin farmworkers served by a federally-qualified health center-faith-based partnership: an exploratory study. *Journal of Immigrant and Minority Health*. doi: 0.1007/s10903-013-9845-1
- Lueck, K., & Wilson, M. (2011). Acculturative stress in Latino immigrants: The impact of social, socio-psychological and migration-related factors. *International Journal of Intercultural Relations, 35*(2), 186-195.
- Magaña, C. G., & Hovey, J. D. (2003). Psychosocial stressors associated with Mexican migrant farmworkers in the Midwest United States. *Journal of Immigrant Health, 5*(2), 75-86. doi: 10.1023/a:1022955825650
- Magaña, J. R., de la Rocha, O., Amsel, J., & Magaña, H. A. (1996). Revisiting the dimensions of acculturation: Cultural theory and psychometric practice. *Hispanic Journal of Behavioral Sciences, 18*(4), 444-468. doi: 10.1177/07399863960184002

- Magis-Rodríguez, C., Lemp, G., Hernandez, M. T., Sanchez, M. A., Estrada, F., & Bravo-García, E. (2009). Going north: Mexican migrants and their vulnerability to HIV. *JAIDS Journal of Acquired Immune Deficiency Syndromes*, 51(Suppl1), S21-S25. doi: 10.1097/QAI.0b013e3181a26433
- Marín, B. V., Marín, G., Padilla, A. M., & de la Rocha, C. (1983). Utilization of traditional and non-traditional sources of health care among Hispanics. *Hispanic Journal of Behavioral Sciences*, 5(1), 65-80. doi: 10.1177/07399863830051004
- Masten, W. G., Caldwell-Colbert, A. T., Alcalá, S. J., & Mijares, B. E. (1986). Confiabilidad y validez de la Escala de Depresión del Centro de Estudios Epidemiológicos. *Hispanic Journal of Behavioral Sciences*, 8(1), 77-84. doi: 10.1177/07399863860081003
- Maupin, J. N., Ross, N., & Timura, C. A. (2011). Gendered experiences of migration and conceptual knowledge of illness. *Journal of Immigrant and Minority Health*, 13(3), 600-608. doi: 10.1007/s10903-010-9333-9
- Maxwell, J. C., Cravioto, P., Galván, F., Ramírez, M. C., Wallisch, L. S., & Spence, R. T. (2006). Drug use and risk of HIV/AIDS on the Mexico-USA border: A comparison of treatment admissions in both countries. *Drug and Alcohol Dependence*, 82(Suppl 1), S85-S93. doi: 10.1016/s0376-8716(06)80014-1
- McVea, K. (1997). Lay injection practices among migrant farmworkers in the age of AIDS: Evolution of a biomedical folk practice. *Social Science & Medicine*, 45(1), 91-98. doi: 10.1016/s0277-9536(96)00318-8
- Mejía, O. L., & McCarthy, C. J. (2010). Acculturative stress, depression, and anxiety in migrant farmwork college students of Mexican heritage. *International Journal of Stress Management*, 17(1), 1-20. doi: 10.1037/a0018119
- Mobed, K., Gold, E., & Schenker, M. (1992). Occupational health problems among migrant and seasonal farm workers. *The Western journal of medicine*, 157(3), 7.
- Morán, C., Landero, R., & González, M. T. (2010). COPE-28: Un análisis psicométrico de la versión en Español del Brief COPE. *Universitas Psychologica*, 9(2), 543-552.
- Muñoz-Laboy, M., Hirsch, J. S., & Quispe-Lazaro, A. (2009). Loneliness as a sexual risk factor for male Mexican migrant workers. *American Journal of Public Health*, 99(5), 802-810. doi: 10.2105/ajph.2007.122283
- Nandi, A., Galea, S., Lopez, G., Nandi, V., Strongarone, S., & Ompad, D. C. (2011). Access to and use of health services among undocumented Mexican immigrants in a US urban area. *American Journal of Public Health*, 98(11), 2011-2020. doi: 10.2105/ajph.2006.096222

- Organista, K. C., Alvarado, N. J., Balblutin-Burnham, A., Worby, P., & Martinez, S. R. (2006). An exploratory study of HIV prevention with Mexican/Latino migrant day laborers. *Journal of HIV/AIDS & Social Services*, 5(2), 89-114. doi: 10.1300/J187v05n02\_08
- Organista, K. C., & Kubo, A. (2005). Pilot survey of HIV risk and contextual problems and issues in Mexican/Latino migrant day laborers. *Journal of Immigrant Health*, 7(4), 269-281. doi: 10.1007/s10903-005-5124-0
- Organista, K. C., Organista, P. B., Bola, J. R., de Alba G, J. E. G., & Morán, M. A. C. (2000). Predictors of condom use in Mexican migrant laborers. *American Journal of Community Psychology*, 28(2), 245-265. doi: 10.1023/a:1005191302428
- Organista, K. C., Organista, P. B., de Alba G, J. E. G., & Morán, M. A. C. (1996). AIDS and condom-related knowledge, beliefs, and behaviors in Mexican migrant laborers. *Hispanic Journal of Behavioral Sciences*, 18(3), 392-406. doi: 10.1177/07399863960183008
- Organista, K. C., Organista, P. B., García de Alba G, J. E., & Castillo Morín, M. A. (1997). Psychosocial predictors of condom use in Mexican migrant laborers. *Revista Interamericana de Psicología*, 31(1), 77-90.
- Organista, P. B., & Organista, K. C. (1997). Culture and gender sensitive AIDS prevention with Mexican migrant laborers: A primer for counselors. *Journal of Multicultural Counseling and Development*, 25(2), 121-129. doi: 10.1002/j.2161-1912.1997.tb00322.x
- Organista, P. B., Organista, K. C., & Soloff, P. R. (1998). Exploring AIDS-related knowledge, attitudes, and behaviors of female Mexican migrant workers. *Health & Social Work*, 23(2), 96-103.
- Ortiz, I. E., & Torres, E. C. (2007). Curanderismo and the treatment of alcoholism: Findings from a focus group of Mexican curanderos. *Alcoholism Treatment Quarterly*, 25(4), 79-90. doi: 10.1300/J020v25n04\_06
- Padilla, A. M., Cervantes, R. C., Maldonado, M., & Garcia, R. E. (1988). Coping responses to psychosocial stressors among Mexican and Central American immigrants. *Journal of Community Psychology*, 16(4), 418-427. doi: 10.1002/1520-6629(198810)16:4<418::aid-jcop2290160407>3.0.co;2-r
- Parra-Cardona, J. R., Bullock, L. A., Imig, D. R., Villarruel, F. A., & Gold, S. J. (2006). "Trabajando duro todos los días: Learning from the life experiences of Mexican-origin migrant families. *Family Relations*, 55(3), 361-375. doi: 10.1111/j.1741-3729.2006.00409.x

- Parrado, E. A., & Flippen, C. (2010). Community attachment, neighborhood context, and sex worker use among Hispanic migrants in Durham, North Carolina, USA. *Social Science & Medicine*, 70(7), 1059-1069. doi: 10.1016/j.socscimed.2009.12.017
- Perczek, R., Carver, C. S., Price, A. A., & Pozo-Kaderman, C. (2000). Coping, mood, and aspects of personality in Spanish translation and evidence of convergence with English versions. *Journal of Personality Assessment*, 74(1), 63-87. doi: 10.1207/s15327752jpa740105
- Persichino, J., & Ibarra, L. (2012). HIV and Latino migrant workers in the USA. *Ethnic and Racial Studies*, 35(1), 120-134. doi: 10.1080/01419870.2011.594167
- Poss, J., Pierce, R., & Prieto, V. (2005). Herbal remedies used by selected migrant farmworkers in El Paso, Texas. *The Journal of Rural Health*, 21(2), 187-191. doi: 10.1111/j.1748-0361.2005.tb00081.x
- Poss, J. E. (1998). The meanings of tuberculosis for Mexican migrant farmworkers in the United States. *Social Science & Medicine*, 47(2), 195-202. doi: 10.1016/s0277-9536(98)00062-8
- Poss, J. E. (2000). Factors associated with participation by Mexican migrant farmworkers in a tuberculosis screening program. *Nursing Research*, 49(1), 20-28. doi: 10.1097/00006199-200001000-00004
- Prelow, H. M., Tein, J.-Y., Roosa, M. W., & Wood, J. (2000). Do coping styles differ across sociocultural groups? The role of measurement equivalence in making this judgement. *American Journal of Community Psychology*, 28(2), 225-244. doi: 10.1023/a:1005139318357
- Prilleltensky, I., & Prilleltensky, O. (2006). *Promoting well-being: Linking personal, organizational, and community change*. Hoboken, NJ US: John Wiley & Sons Inc.
- Puente-Díaz, R., & Anshel, M. H. (2005). Sources of acute stress, cognitive appraisal, and coping strategies among highly skilled Mexican and U.S. competitive tennis players. *The Journal of Social Psychology*, 145(4), 429-446. doi: 10.3200/socp.145.4.429-446
- Pylypa, J. (2001). Self-medication practices in two California Mexican communities. *Journal of Immigrant Health*, 3(2), 59-75. doi: 10.1023/a:1009509815804
- Quandt, S., Clark, H., Rao, P., & Arcury, T. (2007). Oral health of children and adults in Latino migrant and seasonal farmworker families. *Journal of Immigrant and Minority Health*, 9(3), 229-235. doi: 10.1007/s10903-006-9033-7

- Quandt, S., Grzywacz, J., Talton, J., Trejo, G., Tapia, J., D'Agostino, R., . . . Arcury, T. (2013). Evaluating the effectiveness of a lay health promoter-led, community-based participatory pesticide safety intervention with farmworker families. *Health Promotion Practice, 14*(3), 425-432. doi: 10.1177/1524839912459652
- Quandt, S. A., Arcury, T. A., Austin, C. K., & Cabrera, L. F. (2001). Preventing occupational exposure to pesticides: Using participatory research with Latino farmworkers to develop an intervention. *Journal of Immigrant Health, 3*(2), 85-96. doi: 10.1023/a:1009513916713
- Quesada, J. (2011). No soy welferero: undocumented Latino laborers in the crosshairs of legitimation maneuvers. *Medical Anthropology: Cross-Cultural Studies in Health and Illness, 30*(4), 386-408. doi: 10.1080/01459740.2011.576904
- Radloff, L. S. (1977). The CES-D scale. *Applied Psychological Measurement, 1*(3), 385-401. doi: 10.1177/014662167700100306
- Ramos-Sánchez, L., & Atkinson, D. R. (2009). The relationships between Mexican American acculturation, cultural values, gender, and help-seeking intentions. *Journal of Counseling & Development, 87*(1), 62-71. doi: 10.1002/j.1556-6678.2009.tb00550.x
- Ross, N., Maupin, J., & Timura, C. A. (2011). Knowledge organization, categories, and ad hoc groups: Folk medical models among Mexican migrants in Nashville. *Ethos, 39*(2), 165-188. doi: 10.1111/j.1548-1352.2011.01183.x
- Rubalcava, L. N., Teruel, G. M., Thomas, D., & Goldman, N. (2008). The healthy migrant effect: New findings from the Mexican Family Life Survey. *American Journal of Public Health, 98*(1), 78-84. doi: 10.2105/ajph.2006.098418
- Sakala, C. (1987). Migrant and seasonal farmworkers in the United States: A review of health hazards, status, and policy. *International Migration Review, 21*(3), 659-687.
- Salgado de Snyder, V. N. (1993). El impacto psicosocial de la migración México-E. U. en las mujeres que se van y en las que se quedan. *Revista de Psicología Social y Personalidad, 9*(2), 67-76.
- Salgado de Snyder, V. N., Cervantes, R. C., & Padilla, A. M. (1990). Migración y estrés postraumático: el caso de los mexicanos y centroamericanos en los Estados Unidos. *Acta Psiquiátrica y Psicológica de América Latina, 36*(3-4), 137-145.
- Schwartz, S. J., Unger, J. B., Zamboanga, B. L., & Szapocznik, J. (2010). Rethinking the concept of acculturation: Implications for theory and research. *American Psychologist, 65*(4), 237-251. doi: 10.1037/a0019330

- Schwartz, S. J., & Zamboanga, B. L. (2008). Testing Berry's model of acculturation: A confirmatory latent class approach. *Cultural Diversity and Ethnic Minority Psychology, 14*(4), 275-285. doi: 10.1037/a0012818
- Shehadeh, N., McCoy, H. V., Rubens, M., Batra, A., Renfrew, R., & Winter, K. (2012). The impact of ethnic identity on changes in high risk HIV behaviors in sexually active migrant workers. *Journal of Immigrant and Minority Health, 14*, 100-106.
- Shinnar, R. S. (2008). Coping with negative social identity: The case of Mexican immigrants. *The Journal of Social Psychology, 148*(5), 553-575. doi: 10.3200/socp.148.5.553-576
- Slesinger, D., & Cautley, E. (1981). Medical utilization patterns of Hispanic migrant farmworkers in Wisconsin. *Public health reports, 96*(3), 9.
- Slesinger, D. P., & Richards, M. (1981). Folk and clinical medical utilization patterns among Mejjicano migrant farmworkers. *Hispanic Journal of Behavioral Sciences, 3*(1), 59-73.
- Stodolska, M., & Santos, C. A. (2006). Transnationalism and leisure: Mexican temporary migrants in the U.S. *Journal of Leisure Research, 38*(2), 143-167.
- Tafur, M. M., Crowe, T. K., & Torres, E. (2009). A review of curanderismo and healing practices among Mexicans and Mexican Americans. *Occupational Therapy International, 16*(1), 82-88. doi: 10.1002/oti.265
- Ullmann, S. H., Goldman, N., & Massey, D. S. (2011). Healthier before they migrate, less healthy when they return? The health of returned migrants in Mexico. *Social Science & Medicine, 73*(3), 421-428. doi: 10.1016/j.socscimed.2011.05.037
- Vaughan, E. (1993). Chronic exposure to an environmental hazard: Risk perceptions and self-protective behavior. *Health Psychology, 12*(1), 74-85. doi: 10.1037/0278-6133.12.1.74
- Vaughan, E. (1995). The socioeconomic context of exposure and response to environmental risk. *Environment and Behavior, 27*(4), 454-489. doi: 10.1177/0013916595274002
- Vaughan, E., & Dunton, G. F. (2007). Difficult socio-economic circumstances and the utilization of risk information: A study of Mexican agricultural workers in the USA. *Health, Risk & Society, 9*(3), 323-341. doi: 10.1080/13698570701486054
- Velasco Ortiz, L. (1993). Identidad étnica y migración: Indígenas en la frontera noroeste de México. *Revista de Psicología Social y Personalidad, 9*(2), 59-66.

- Villarejo, D. (2003). The health of U.S. hired farm workers. *Annual Review of Public Health, 24*(1), 175.
- Waldstein, A. (2008). Diaspora and health? Traditional medicine and culture in a Mexican migrant community. *International Migration, 46*(5), 95-117. doi: 10.1111/j.1468-2435.2008.00490.x
- Waldstein, A. (2010). Popular medicine and self-care in a Mexican migrant community: Toward an explanation of an epidemiological paradox. *Medical Anthropology, 29*(1), 71-107. doi: 10.1080/01459740903517386
- Weclaw, R. V. (1975). The nature, prevalence, and level of awareness of 'curanderismo' and some of its implications for community mental health. *Community Mental Health Journal, 11*(2), 145-154. doi: 10.1007/bf01420352
- Weigel, M., & Armijos, R. (2012). Exploratory study of the occupational health and health-seeking of migrant and seasonal farmworkers on the U.S.-Mexico border. *Journal of Immigrant and Minority Health, 14*, 648-656.
- Weigel, M., Armijos, R., Hall, Y., Ramirez, Y., & Orozco, R. (2007). The household food insecurity and health outcomes of U.S.-Mexico border migrant and seasonal farmworkers. *Journal of Immigrant and Minority Health, 9*(3), 157-169. doi: 10.1007/s10903-006-9026-6
- Weiler, D. M., & Crist, J. D. (2009). Diabetes self-management in a Latino social environment. *The Diabetes Educator, 35*(2), 285-292. doi: 10.1177/0145721708329545
- Weinreich, P. (2009). 'Enculturation', not 'acculturation': Conceptualising and assessing identity processes in migrant communities. *International Journal of Intercultural Relations, 33*(2), 124-139. doi: 10.1016/j.ijintrel.2008.12.006
- Weiser, L., Endler, N. S., & Parker, J. D. (1991). State anxiety, trait anxiety, and coping style in Mexican and Canadian young adults. *Anxiety Research, 4*(2), 125-139.
- Wilkinson, W. V. (1989). The influence of lifestyles on the patterns and practices of alcohol use among South Texas Mexican Americans. *Hispanic Journal of Behavioral Sciences, 11*(4), 354-365. doi: 10.1177/07399863890114005
- Worby, P. A., & Organista, K. C. (2007). Alcohol use and problem drinking among male Mexican and Central American im/migrant laborers. *Hispanic Journal of Behavioral Sciences, 29*(4), 413-455. doi: 10.1177/0739986307308765

- Yabiku, S. T., & Farone, D. W. (2007). Social and personal coping resources, functional impairment, and perceived health status among Mexican-origin elders. *Journal of Ethnic & Cultural Diversity in Social Work: Innovation in Theory, Research & Practice*, 15(3-4), 31-50. doi: 10.1300/J051v15n03\_02
- Yznaga, S. d. (2008). Using the genogram to facilitate the intercultural competence of Mexican immigrants. *The Family Journal*, 16(2), 159-165. doi: 10.1177/1066480707313801
- Zacharias, S. (2006). Mexican Curanderismo as ethnopsychotherapy: A qualitative study on treatment practices, effectiveness, and mechanisms of change. *International Journal of Disability, Development and Education*, 53(4), 381-400. doi: 10.1080/10349120601008522