Hogan, A; Espinoza-Ortiz, A; Díaz-Valdes, A; Sisay, E.; Rocha-Jiménez,T. (2024).
Social support and religion. Revista Chilena de Antropología 49: 1-24
https://doi.org/ 10.5354/0719-1472.2024.75300

Social support and religion. Protective factors of symptoms of depression throughout the complex Haitian migration trajectories in Santiago (Chile) and Tijuana (Mexico)

Apoyo social y religión. Factores protectores de síntomas de depresión a lo largo de las complejas trayectorias migratorias de los haitianos en Santiago (Chile) y Tijuana (México)

Annika C. Hogan
Department of Population and Family Health, Columbia University (New York, USA)
(ach2201@cumc.columbia.edu) https://orcid.org/0000-0002-7440-5233
Role: data curation, formal analysis, and writing the original draft

Ana Karen Espinoza-Ortiz
Núcleo Milenio para la Evaluación y Análisis de Políticas de Drogas (Santiago, Chile)
(espinoza.anakaren@gmail.com) http://orcid.org/0000-0001-9222-691X
Role: Data curation and formal analysis

Antonia Díaz-Valdes
Society and Health Research Center, Universidad Mayor (Santiago, Chile)
(antonia.diazvaldes@umayor.cl) https://orcid.org/0000-0002-3194-0893
Role: Data curation

Emnet Sisay
Department of Epidemiology (Harvard University, USA)
(esisay@hsph.harvard.edu) https://orcid.org/0000-0001-6258-5743
Role: Investigation and writing the introduction

Teresita Rocha-Jiménez
Society and Health Research Center, Universidad Mayor (Santiago, Chile)
(teresita.rocha@umayor.cl) https://orcid.org/0000-0003-2455-2865
Role: Conceptualization, investigation, data curation, funding acquisition, methodology designing, writing review and editing.

ABSTRACT

As complex migration trajectories become increasingly more common, understanding potential protective factors of symptoms of depression is critical. Therefore, the aim of this paper was to understand how social support and religion may be associated with better outcomes for migrants' mental health among Haitian migrants at different points in their intricate migration trajectories. Through a quantitative cross-sectional study using a non-probabilistic sampling, we surveyed 405 Haitian migrants in Santiago, Chile (n=207), and Tijuana, Mexico (n=198). Bivariate analyses revealed that participants in Chile had a longer time post-migration (4.6 years) than those in Mexico (3.7 months) (Chi-square p<0.001). Multivariable logistic regression findings confirm social support and religion are protective factors of depression symptoms but differ depending on the point in the migration trajectory. Having someone to trust was a significant protective factor for Haitian migrants in Chile (OR= 0.187, 95% CI 0.054 – 0.646, p=0.008) and Mexico (OR=0.080, 95% CI 0.007 – 0.858, p=0.037). Identifying with a religion reduced the odds of depressive symptoms by 60.3% for those in Chile (95% CI 0.170 – 0.923, p=0.032) but not in Mexico. Findings support re-classifying protective factors such as social support as dynamic, highlighting experiences in each migration step, rather than linear or non-static. Findings provide insight into how to best prevent and treat mental health throughout migrants' diverse journeys. Ideally, future longitudinal studies should explore the nuances of social support during different migration phases in Latin America and their relation to mental health outcomes.

Key words: social support, religion, symptoms of depression, Haitian migrants

INTRODUCTION

Economic, political, and social unrest, in addition to climate change, have driven increasingly more individuals to migrate in recent decades, with the estimated number of international migrants globally reaching 281 million people in 2020 (International Organization for Migration, 2021). Such trends, in conjunction with changes to immigration policies in some countries (e.g., United States (US), Chile) and the COVID-19 pandemic, have led to changes in migration journeys throughout Latin America and the Caribbean, including im/mobility, uncertainty, and multiple destination (Faret et al., 2021; Frank-Vitale, 2020; Menjívar, 2006; Zimmerman et al., 2011).

Throughout a migration trajectory (i.e., an open spatio-temporal process of migration (Schapendonk et al., 2020)), an individual experiences a multitude of life changes and challenges that can have a deleterious effect on their mental health (Choy et al., 2021; Duncan, 2015; Jolof et al., 2022; Temores-Alcántara et al., 2015; Virupaksha et al., 2014). This is evidenced by migrants and refugee populations globally exhibiting increased rates of depression, anxiety, post-traumatic stress disorder (PTSD), and psychosis (Bourque et al., 2011; Breslau et al., 2011; Bustamante et al., 2018; Leiler et al., 2019). However, it is important to note that not all migration experiences are negative and some may not impact individual's mental health (Virupaksha et al., 2014). For instance, migration and mobility may translate into more opportunities, reduced discrimination, or better healthcare access (Lee, 2008; Steele, 2018). Such differences in the impact of migration largely come from the intersection of race, class, and legal status (Waters & Kasinitz, 2021).

Poor mental health outcomes can be explained in part as a response to the multitude of stressors pre-migration (e.g., poor socioeconomic opportunities, violence) as well as stressors during transit (e.g., violence, exploitation) and lack of access to continued healthcare and denial of basic needs and rights while in transit (Chen et al., 2022; Crocker, 2015; Fanfan et al., 2020; UNHCR, 2016; Virupaksha et al., 2014). Furthermore, the limbo period of being in-transit is characterized by uncertainty, waiting, and at times danger (Frank-Vitale, 2020). Upon arrival in a receiving country, individuals may also experience alienation, discrimination, family separation, fear of detention or deportation, and structural vulnerability (Crocker, 2015; Galvan et al., 2022; Gutierrez-Vazquez et al., 2018; Keys et al., 2015; Quesada et al., 2011). An ethnographic study of Mexican immigrants in the United States described the compounding effect of such stressors throughout a lifetime on individuals' "emotional suffering" (Crocker, 2015, p. 8). Throughout Latin America and the Caribbean, migrants, especially irregular migrants, are often excluded from social protection systems, including healthcare and education, due to legal and administrative barriers (Blukacz et al., 2020, 2023; Carreño Calderón et al., 2021; ECLAC, 2021). The lack of access to these resources further exacerbates the risk of depression (Blukacz et al., 2020).

There has also been limited research demonstrating how mental health outcomes vary during a migration trajectory in the Latin American and Caribbean migration context (Chen et al., 2022; Gil Everaert, 2021). Migrants whose transit has been interrupted by uncertain mobility onward to a final destination have been found to have a higher prevalence of common mental disorders (Bojorquez et al., 2022). Similarly, migrants awaiting the outcome of their application for asylum or with uncertain status reported higher psychological distress compared to migrants who have received immigration decisions (Leiler et al., 2019; Walther et al., 2020). Additionally, Chen et al. (2022) found that individuals intending to migrate from an interception point to a final destination had significantly fewer depression symptoms. However, Carreño et al. (2023) found nuances in the mental health experiences in international migrant children and adolescents who migrated to Chile with narratives of fear and uncertainty but also hope while in transit. Further research is needed to fully understand mental health outcomes throughout complex migration trajectories.

There are several factors that have been found to be protective of poor mental health outcomes (e.g., education, age, language proficiency) (Bhugra, 2004). For example, as demonstrated in Siriwardhana et al.'s systematic review (Siriwardhana et al., 2014), resilience has been found to be a protective factor for migrants and people on the move. However, not only is resilience interrelated with social networks, religion and social support have been found to mediate the relationship between resilience and mental health outcomes (Revens et al., 2021; Siriwardhana et al., 2014). Thus, the present study will focus on the role of social support and religion on migrants' mental health status.

SOCIAL SUPPORT

Though social support has been defined in many ways, it can be broadly characterized as the "support accessible to an individual through social ties to other individuals, groups, and the larger community" (Lin et al., 1979, p. 109). Social support is often broken down into four domains: material (i.e., the exchange of resources or goods), instrumental (i.e., supporting someone perform a task), emotional (i.e., shared bonds that result in trust, understanding, and affection), and appraisal (i.e., relaying of information between people) (Tardy, 1985).

Social support has long been found to be positively associated with better mental health outcomes and well-being in the general population (Kessler & McLeod, 1985). This relationship persists among migrants. Several studies have found that social support is inversely associated with different measures of psychological distress in various Latin American migrant collectives (Brunnet et al., 2018; Gutierrez-Vazquez et al., 2018; Mulvaney-Day et al., 2007; Revens et al., 2021). The importance of social support during migration is backed by narrative interviews of Central American women in transit through Mexico who noted social support as a key source of resilience (Lemus-Way & Johansson, 2020). Beyond emotional support, social support networks can offer appraisal support. Ethnographic fieldwork and qualitative interviews by Plasencia (2021) give insight into the financial support, such as job recommendations, and informational support, such as sharing how to access health resources, that peer social networks provide among an older Latinx immigrant population in the United States.

Until recently, social networks and social support have been viewed statically and linear, rather than evolving throughout a migration trajectory that may involve several steps such as immobility for unknown periods of time, deportation, and diverse destinations (Menjívar, 2006; Schapendonk, 2015; Zimmerman et al., 2011). Limited studies on social support throughout a migration trajectory indicate that while some new relationships are added and other social ties are maintained throughout a migration trajectory, existing relationships not only evolve but can weaken (Behrendt et al., 2022; Ryan, 2021). A longitudinal qualitative study on social support throughout the migration trajectories of unaccompanied refugee minors found that the quality and contexts of existent relationships changed throughout a migration trajectory (Behrendt et al., 2022). Furthermore, migrants' changing social networks can further influence their migration trajectories, at times enabling or restricting onward migration (Wissink et al., 2020). A wide gap in the literature remains in our understanding of how varying social support throughout a complex migration trajectory affects mental health outcomes and whether there are differences in domains of social support throughout a migration trajectory.

RELIGION

There has been a recent push for the increased inclusion of religion when studying social support (Merino, 2014). Religion has been found to have an inverse relationship with mental health outcomes (i.e., anxiety, substance use, depression, and suicide) among adults, including in South America, though there are differences based on sex and age with older women having the strongest associations (AbdAleati et al., 2016; Formoso-Suárez et al., 2022; Santero et al., 2019). There are many facets of religion that can be measured, particularly intrinsic and extrinsic religiosity. Intrinsically, religion provides individuals with psychological support through coping methods, strength, and motivation (Boyas et al., 2018; Eppsteiner & Hagan, 2016; Silva et al., 2017).

Religion can also act as a mediator in the relationship between social networks and mental health outcomes (Revens et al., 2021; Siriwardhana et al., 2014). Extrinsic religion can offer individuals expanded nonkin social networks, closer social ties, as well as increased social support building a stronger community (Bradley, 1995; Merino, 2014). Religious social ties have the added element of common beliefs as well as understandings and expectations about support (Merino, 2014). The social networks and social capital religious affiliation offers has been found to improve both health and life satisfaction (Lim & Putnam, 2010; Yeary et al., 2012).

Thus, the present study focuses on social support as well as religion, throughout complex, interrupted migration trajectories. Specifically, this study will measure the impact of different emotional and instrumental social support as well as religious affiliation on depressive symptoms.

CHARACTERIZATION OF THE HAITIAN MIGRATION FLOW IN LATIN AMERICA

Our study population are Haitian migrants, who have experienced the aforementioned complex migration trajectories. Haitians had a history of migrating primarily to the Dominican Republic, however, factors like racism, discrimination, and xenophobia spurred Haitians to move to Chile and Brazil (Keys et al., 2015). The first wave of Haitian migration to Chile began in 2015 as, at the time, Chile offered tolerant immigration policies and economic opportunity (Bartlett, 2021; Yates, 2021). By 2020, Haitians became the third highest migrant collective in Chile (Servicio Jesuita a Migrantes, 2020). However, a 2018 migration policy reform made obtaining a visa uniquely difficult for Haitians and introduced further bureaucratic challenges and barriers to accessing resources for Haitians living in Chile (Bartlett, 2021; Carreño Calderón et al., 2021; Servicio Jesuita a Migrantes, 2020; Yates, 2021). Such barriers, as well as economic hardship (in part due to the COVID-19 pandemic) and rumors that the Biden administration in the United States (US) would adopt more favorable policies towards migrants, spurred some Haitians to decide to migrate to border cities, such as Tijuana, in Mexico in hopes of migrating to the US in 2021 (Bartlett, 2021; Organización Internacional para las Migraciones (OIM), 2022; Yates, 2021). By the beginning of 2022, 36,500 Haitians were expected to arrive in cities in northern Mexico (Rivera, 2021). This migration from Chile to Mexico is often traversed over land through South and Central America and is characterized as one of insecurity, vulnerability, and danger (Barba-Sánchez, 2019; Taylor, 2022; Yates, 2021). Vulnerability continues when migrants reach the US/ Mexico border and often live in migrant camps, where they can be exposed to not only violence but the politics of humanitarian aid and ideas of deservingness (Wurtz, 2022).

Uncertainty does not end once migrants reach their intended final destination though, as there have been verified reports of the deportations of Haitian migrants from the United States (Alden & Tippett, 2021; Watkins et al., 2023). Since September 2021, 2,000 Haitians who crossed the US-Mexico border have been deported to Haiti and 8,000 Haitians have been returned to Mexico (Alden & Tippett, 2021). Some of the individuals who were deported to Haiti and had a valid Chilean visa or a visa request in progress, migrated back to Chile (Watkins et al., 2023). This trajectory is one of many that Haitian migrants take. Dias et al. (2020) explore 34 other migration journeys that Haitian migrants often take and, overall, characterize Haitian migration as an "open movement" through "flexible spaces" that have been "shaped through the intricate, repeated, and habitual movements of migrants" (p. 15). Thus, it is evident that Haitian migrants' migration trajectories are complex; their migration is often forced and is characterized by multiple interception points, re-routing, and many migration phases or steps (Dias et al., 2020; Schapendonk et al., 2020). Given this complexity, it is unsurprising that Haitian migrants in several different receiving countries have been found to have elevated rates of depression, anxiety, and PTSD (Brunnet et al., 2018; Fanfan et al., 2020; Kaiser et al., 2015).

Social support in Haiti, tèt ansanm in Creole, is a key facet of Haitian culture that migrants have reported is missing after they begin their migration trajectory (Kaiser et al., 2015). Tèt ansanm is characterized by reciprocal social support and solidarity (Kaiser et al., 2015). Despite the salience of social support in Haitian culture, little is known about how social support affects mental health in the Haitian migrant collective (Chen et al., 2022; Kaiser et al., 2015). Chen et al. (2022) found that social support variables had a direct protective effect on depression symptoms in Haitians living in Chile. A mixed-method study examining the role of social support among Haitian migrants living in the Dominican Republic found that a lack of social support was associated with increased depression, anxiety, and mental distress (Kaiser et al., 2015). However, in-depth interviews with participants from the same study also described how social networks were a source of stress (e.g., expectations of remittances, maintaining relationships from another country) (Kaiser et al., 2015).

Further examination of social support at different stages of a complex migration trajectory for Haitian migrants is needed in addition to investigating how different types of social support affect mental health outcomes. As detailed in Chen et al. (2022), many Haitian migrants in Santiago intended to leave Chile to continue migrating after almost seven years in this country. Santiago was the first point of this study and Tijuana, Mexico was the second, the United States was often the intended destination of this onward migration (Bartlett, 2021; OIM, 2022; Yates, 2021). Many of the participants in this study have migrated before to the Dominican Republic or Brazil; thus, Chile was not their first step in their migration journey. Therefore, the primary objective of this paper is to investigate the relationship between social support, religion, and symptoms of depression among Haitian migrant populations in Santiago, Chile and Tijuana, Mexico.

Our analysis was rooted in Bhugra's Migration Phases and Psychiatric Disorders framework with an added focus on the differences in social support and religion's effects of diverse points of a migration trajectory (Bhugra, 2004).

METHODS

The present explicative sequential mixed-method study sought to survey and subsequently performed in-depth interviews with Haitian migrants living in Santiago, Chile and Tijuana, Mexico. Study sampling took place from February 2021 to March 2022 in Santiago and from January to March 2022 in Tijuana. Before conducting the surveys, the research team spent considerable time with the community. We built a field team composed of Haitian migrants and strengthened ties with migrants (e.g., Fundación Urgencia País). We conducted extensive ethnographic fieldwork that entailed spending time with the community, sharing food and experiences, participant observation, informal conversations with other migrant collectives who also live in the migrant camp, and in-depth interviews with 31 participants in both Chile and Mexico, which helped us inform the discussion of the present manuscript. Ethnography enabled us to capture the nuances and details of the migration trajectories in an exceptionally complex scenario (i.e., the COVID-19 pandemic and the emigration of Haitians from Chile and Brazil). The details of the ethnographic fieldwork and the community involvement can be found in McLaren et al. (2024). The present paper details quantitative findings from the surveys included in the larger mixed-method study.

Eligibility criteria for the surveys included (a) being 18 years or older; (b) speaking Spanish or Creole; (c) willing and able to provide informed consent; (d) born in Haiti, and (e) living in Chile or Mexico at the time of participation. Study instruments (e.g., informed consent, survey, information flyers) were prepared in Spanish and translated to Creole by the study field staff.

When the present study was designed, a power analysis was conducted to determine the necessary sample size in both Santiago and Tijuana to detect depression symptoms (Pourhoseingholi et al., 2013). This power analysis was based on a conservative lower prevalence of symptoms of depression (assuming a prevalence of 13.9%) as well as the recommended 95% confidence interval and effect size of 1.5 (Martinez Tyson et al., 2011; Medina-Mora et al., 2003). The sampling approach in Santiago was non-probabilistic and originally consisted of respondent-driven sampling, however, after data collection began the research team observed that participants who were intending to continue migrating onward were less likely to refer contacts to the study. To adjust for this potential bias, the research team adopted two-stage conglomerate sampling. First, the metropolitan region of Santiago was stratified into subsamples with a higher density of Haitian migrants and where research staff had community presence using public information on the presence of the Haitian community in Santiago, Chile (Contreras, 2020). Based on this, the neighborhoods Cerillos, Santiago Centro, and Cerro Navia were chosen. Additionally, a key informant was located in a large migrant camp in Santiago, and therefore, data was also collected in this community. The second stage of sampling consisted of individuals in those areas meeting eligibility criteria being invited to participate in the study.

The sampling approach in Mexico was similarly non-probabilistic. First, the research team identified areas in Tijuana where large groups of migrants congregated in their attempts to navigate the US asylum process. This was usually next to the San Ysidro point of entry where migrant shelters and local organizations were located. Second, individuals who were eligible for the study and wanted to participate were invited.

This research was reviewed and approved by the ethics review committees of Universidad Mayor in Santiago, Chile (#0169) and Universidad de Xochicalco, Tijuana in Mexico. Furthermore, this research project was designed and executed in collaboration with a Community Advisory Board (CAB) to ensure cultural competence and relevance to the Haitian migrant collective, as detailed in McLaren et al. (2024).

Surveys administered to the samples in Santiago and Tijuana included questions related to symptoms of depression, social support, religious affiliation, and sociodemographic variables. Variables were operationalized as follows:

Depression Symptoms: Depression symptomology was measured using the 20-items Center for Epidemiologic Studies scale (CESD-R-20), administered in Spanish or Creole (Radloff, 1977). The CESD-R-20 has a range of 0-60 and it specifically measures symptoms of sadness (dysphoria), loss of interest (anhedonia), appetite, sleep, thinking, guilt, tired (fatigue), movement (agitation), and suicidal ideation (Radloff, 1977). Individuals with a score of 16 or greater were coded as displaying symptoms of depression while individuals with a score less than 16 and therefore did not meet the threshold were considered to no symptoms of depression.

Social Support Predictors: Respondents were asked four dichotomous (1= yes, 0= no) questions from the Medical Outcome Study Social Support Survey (Moser et al., 2012), which were chosen based on the recommendations of the Community Advisory Board. These items asked whether respondents had someone they could trust, someone to help them when they got sick, someone to lend them money, and someone to show them love and affection. Additionally, whether an individual identified with any religion was included as a social support question.

Other Relevant Variables*:* Sociodemographic questions and other relevant variables for symptoms of depression were included as well. Sex (1= female, 0= male), age (in years), level of education (1= more than primary school, 0= less than primary school), if they had children (1= yes, 0= no), if they were working/employed (1=yes, 0=no), whether they identified as a migrant, Haitian, Chilean, and/or Afro-descendant (participants could identify as multiple categories; 1= identified as migrant, 0= did not identify as a migrant), and how much time they had spent in the country of interview (in months).

Analyses*:* Descriptive statistics were conducted to better understand the samples. Bivariate analyses were performed using Chi-square or Fisher's Exact test for categorical variables and Pearson correlations for continuous variables to assess whether there were significant differences between those who had and did not have depression symptoms (Table 2). Given that that depression prevalence is so different between countries, and the circumstances in which the data was collected too, we chose to run two multivariable logistic regression models per country and not a model with the entire data set. Sociodemographic variables and migration related variables were then included as control variables in the multivariable logistic regression models for both Chile and Mexico. Regression models and adjusted odds ratios (AOR), 95% confidence intervals (95% CI), with p-values less than 0.05 considered to be significant. The software SPSS and R were used for this paper's analyses (IBM Corp, 2021; R Core Team, 2022).

***Handling missing cases**:* Multiple imputation with chained equations (MICE) were used to impute missing data (m=20). Evidence suggest that the data was missing at random. However, MICE has proved to yield to unbiased results even when the data is not missing at random (Schafer & Graham, 2002). Most variables had no missing cases or those were lower than 2%. Relative Increase variance was 0.003, showing an increase of variance below 1%.

RESULTS

Overall, 405 Haitian migrants participated in the survey with 207 individuals participating in Chile and 198 participating in Mexico. Many sociodemographic variables were similar in both samples (as seen in Table 1). Both samples were relatively evenly split by gender with 53.1% of the Chilean sample being male and 51.5% of the Mexican sample being male. Average age was 34.08 years old (standard deviation: 7.3) in Chile and 33.23 years old (standard deviation: 8.3) in Mexico. Whether the respondent had children was also similar (82.1% in Chile compared to 71.2% in Mexico). There were, however, also variables that differed between the samples. Notably, while 36.2% of the sample in Chile was employed, only 1% of the sample in Mexico reported being employed. Whether someone was married also differed, with nearly all (97.5%) of the sample being unmarried (compared to 46.4% in Chile). Level of education also varied between the sample with 78.8% of the sample in Mexico having completed primary school compared to only 57.0% of the Chilean sample.

There were statistically significant differences in the prevalence of depression symptoms between the country of interview; the prevalence of depression symptoms in Mexico was 92.4% compared to 37.2% in Chile (Chi-square $p<0.001$). The amount of time spent in the country of interview also varied significantly between Chile and Mexico, with individuals in Chile having spent an average of 56.2 months (or 4.6 years) in the country and participants in Mexico having only spent an average of 3.7 months in the country (Chi square $p<0.001$).

As seen in Table 2, bivariate tests were run to assess differences between those with and without depression symptoms in each sample. In the sample in Chile, the only demographic or migration related variable that differed significantly between those who had and did not have depression symptoms was whether the respondent identified as a migrant (Chi-square $p=0.024$). Among the sample surveyed in Mexico, whether someone had children (Fisher's Exact test $p=0.039$) and whether someone was employed (Fisher's Exact test $p=0.005$) were the only demographic or migration related variables that differed significantly between those who reported and did not report symptoms of depression.

Contrastingly, bivariate tests already indicated significant differences for some independent variables in both samples (Table 2). Among the sample in Chile, a lower proportion of individuals with depression symptoms (70.1%) had someone to trust (compared to 94.6% among those without depression symptoms; Chi-square $p<0.001$). Similarly, in Chile, a lower proportion of individuals with depression symptoms had someone to lend them money (51.9% compared to 68.5% without depression symptoms; Chi-square $p=0.018$), had someone to take care of them while sick (79.2% compared to 93.8%; Chi-square $p=0.001$), had someone to show them love and affection (80.5% compared to 96.2%; Chi-square $p<0.001$), and identified with a religion (72.7% compared to 86.9%; Chi-square $p=0.011$). However, among the sample in Mexico, only whether someone had someone

to trust and whether someone had someone to take care of them while sick differed significantly between those with and without depression symptoms, with a lower proportion of those with depression symptoms reporting they had someone to trust (47.5% compared to 93.3%; Chi-square $p<0.001$) or had someone to take care of them while sick (32.2% compared to 80.0%; Chi-square $p<0.001$).

Multivariable logistic regressions were then run separately for each country (Chile: N=207; Mexico: N=198), as seen in Table 3. All migration related (e.g., did individuals identify as a migrant, time in country) and sociodemographic variables (e.g., sex, age) were included as control variables in these models. For Haitian migrants who were interviewed in Chile, having someone to trust remained a protective factor, reducing the odds of depression symptoms by 81.3% (AOR= 0.187, 95% CI 0.054 – 0.646, p=0.008). The same was true for Haitian migrants interviewed in Mexico, where having someone to trust reduced the odds of depression symptoms by 92% (AOR=0.080, 95% CI 0.007 – 0.858, p=0.037). Religion was a protective factor for those in Chile alone. Identifying with a religion reduced the odds of depression symptoms for those in Chile by 60.3% (AOR= 0.397, 95% CI 0.170 – 0.923, p=0.034). Additionally, being married/ partnered reduced the odds of depression symptoms in Chile by 55.4% (AOR= 0.446, 95% CI 0.217 – 0.915, p=0.028) but not in the population surveyed in Mexico, and having children increased the odds of depression symptoms 4.235 times in Mexico (AOR= 4.235, 95% CI 1.005 – 17.855, p=0.049).

DISCUSSION

The present study examined the associations between different measures of social support and depression symptoms in Haitian migrants at different points during a migration trajectory. Consistent with previous literature, our findings confirm that social support and religion are protective of depression symptoms in migrant populations (Bendixsen, 2020; Brunnet et al., 2018; Chen et al., 2022; Gutierrez-Vazquez et al., 2018; Moreno et al., 2020; Mulvaney-Day et al., 2007; Revens et al., 2021; Schlechter et al., 2021). However, this research also highlights the differences in depression symptoms and how protective social support and religion are at different points in a migration trajectory.

Our findings highlight the differential impact that different types of social support provide at different points in a migration trajectory. In the separate models for Chile and Mexico, having someone to trust was protective for both those in Mexico and in Chile. Conversely, being affiliated with a religion was only protective for those in Chile. The differences in social support at different points in migration trajectories emphasize the importance of considering protective factors as a temporary or varying factors throughout a migration trajectory, rather than as static factors (Schapendonk, 2015). Our findings substantiate the need for future longitudinal studies and to further investigate what different forms of social support offer individuals during each migration phase. Furthermore, the nuances of each migration phase and how social interactions and support may vary over time stress the importance of studying mental health within the context of migration and mobility and emphasize the need for appropriate preventive and mental health services throughout migration trajectories.

Lastly, our findings show that while having a partner was protective in Chile, having children increased the odds of depression symptoms for those in Mexico 4.235 times (p=0.049). Though having children would seemingly contribute to an individual's social network, having children may have increased individual's risk for depression symptoms as parents may have been separated from their children. This would be consistent with Guo et al.'s (2016) findings that parent/ child separation among migrants increased parent's depression. Alternatively, if parents migrated with their children, this may have increased the parent's responsibility or worries while migrating, as children are particularly vulnerable to exploitation and health concerns while in transit (Carreño et al., 2023). These possibilities indicate the need for future investigation into migrant parents' mental health. And while these characteristics cannot be altered, with further examination these findings can be used to inform mental health services for migrants.

There were significant differences in prevalence of depression symptoms based on the country of interview (37.2% in Chile vs 92.4% in Mexico, p<0.001). The prevalence of depression symptoms in both countries are higher than the prevalence of depression found in the general population during COVID-19, as Duarte and Jiménez-Molina (2021, 2022) found the prevalence of depression in Chile during COVID-19 was 22.6%. The sample in Mexico's prevalence of depression symptoms was also higher compared to other migrant collectives during the COVID-19 pandemic, who had prevalence's of 23% and 38.1% respectively (Attal et al., 2020; Barbato & Thomas, 2021).

We hypothesize that the high prevalence of depression symptoms in our samples, and the higher prevalence in Mexico compared to Chile, can be explained by a multitude of factors related to the migratory context in each country. Firstly, as our analyses indicate, individuals in Mexico had a more recent migration (average time in country = 3.70 months) compared to participants in Chile (average time in country 4.6 years). This is supported by Borjorquez et al. (2022) who found that time since migration was protective against common mental health disorders. Secondly, data collection in Chile occurred earlier in the pandemic (data collection was from February, 2021 to March, 2022 in Chile compared to January to March, 2022 in Mexico). The conditions of the COVID-19 pandemic had a serious deleterious effect on migrant's mental health outcomes (Spiritus-Beerden et al., 2021). Furthermore, the period of time when data was collected in Mexico was particularly politically and socially tense. Speculations that the US's immigration policy "Title 42" would be lifted caused tensions between migrant groups who were all waiting at the US-Mexico border in Tijuana. Migrants of different nationalities (e.g., Salvadoreans, Hondurans, and Mexicans) had been living in provisory precarious camps on the Mexican side of the border (El Chaparral) for over a year awaiting decisions on their requests for asylum in the US (Ayala, 2022; Rocha Jiménez & Lazos, 2022). Violence and discrimination towards Haitians at the border was widespread and basic needs like housing and health were not being fulfilled in Tijuana (Ayala, 2022). Thus, the resulting feelings of insecurity, precariousness, and fear may also explain the high levels of symptoms of depression reported by the Haitians interviewed in Mexico. While conducting ethnography in Tijuana, we heard from migrants that a lot of the anxiety and stress came from not having a place to sleep at night, a job, or any certainty if they could cross to the United States at some point. Additionally, individuals in Mexico had survived the treacherous journey from South America to North America, crossing the Darien Gap, which can result in complex psychological trauma (Taylor, 2022).

Lastly, as previously discussed, there are differences in social support and its associated protectiveness in Chile and Mexico. A higher proportion of individuals in Chile consistently reported having different types of social support compared to those Mexico, as seen in Table 1 (e.g., 92.4% of those in Chile reported having someone to care for them if they were sick compared to only 46.2% in Mexico). Since social support has been found to be key for migrants, especially while in transit and during travel, this is likely a large driving force behind the observed differences in symptoms of depression (Brunnet et al., 2018; Gutierrez-Vazquez et al., 2018; Mulvaney-Day et al., 2007; Plasencia, 2021; Revens et al., 2021). Furthermore, social support has been found to act as a moderating factor between traumatic stress and depression (Ward et al., 2018). More research is needed to understand this relationship between trauma, social support, and mental health in this Haitian migrant population and migrant populations that experience complex migration trajectories.

Our findings also indicate that identifying with a religion played a different protective role depending on the point in an individual's migration trajectory, as religious affiliation was only protective for those in Chile. Religious affiliation can offer individuals a social support system, especially when individuals are away from other social networks like family and friends, as was found in Bendixsen's (2020) ethnographic study of irregular migrants living in Norway who detailed how partaking in religious practices reconstituted their sense of belonging. Since participants in Chile had significantly more time post-migration and had built a strong community, we hypothesize that they had longer to establish social networks associated with their religious affiliation. In contrast, individuals in Mexico who were in-transit, likely relied more on intrinsic religiosity, (e.g., relying on religion for strength and motivation) rather than benefiting from the extrinsic social support of religious affiliation. This hypothesis is supported by Hovey et al.'s (2014) findings that the association between religion and mental health was mediated by social support factors.

LIMITATIONS

There a few important limitations of this study to note. Firstly, the scales used to measure social support were for self-reported perceived social support. There has been some research that suggests that there are differences in the protectiveness of perceived versus received social support (Haber et al., 2007; Prati & Pietrantoni, 2010). Additionally, the survey did not inquire about who participants perceived the source of social support to be (e.g., kinship relationship, friend, etc.) and whether they were transnational (i.e., in another country from where they interview occurred). Some studies have found that some migrant populations do not benefit from transnational social ties (Horst, 2006; Koser Akcapar, 2010). However, a study on German migrants in Great Britain found that transnational social support relationships are more effective in providing emotional support (e.g., someone to confide in) rather than instrumental support (e.g., lending money, taking care of someone when sick) (Herz, 2015). Ethnographic fieldwork conducted by Warner (2007) on Q'eqchi' refugees in Maya Tecún, Mexico also draws attention to the importance of kinship relationships for psychological distress in Mayan culture. Similar ethnographic studies of social support relationships among the Haitian diaspora would be beneficial.

Also, while Haitian migrants were surveyed about their religious affiliation, their beliefs in or practicing of Vodou (sometimes referred to as voodoo), an important and longstanding part of Haitian culture, were not inquired about (Laguerre, 1973). It is therefore unclear if the protection of religious affiliation came from affiliating with Vodou, other organized religions, or both. The relationship between Vodou and mental health, especially as it pertains to treatment, has begun to be explored (Auguste & Rasmussen, 2019), however, future research should continue to explore the relationship between of Vodou, social support, and mental health in Haitian migrants.

CONCLUSION

In conclusion, the protectiveness of different types of social support and religion for symptoms of depression differ throughout a migration trajectory. While having someone to trust, a form of emotional social support, was protective among both those interviewed in Chile and those interviewed in Mexico, religion was protective against symptoms of depression among Haitian migrants in Chile alone. These findings indicate that identifying social support networks, or the lack thereof, could be a useful way to identify individuals vulnerable to depression symptoms and to develop programs and resources tailored to this vulnerable cohort.

FUNDING AND ACKNOWLEDGEMENTS

The authors gratefully acknowledge the participants, community collaborators (Servicio Jesuita a Migrantes, FUPA, Fré, Madres Deportadas en Acción), and field study staff in Chile and Mexico. This research was funded by the Agencia Nacional de Investigación y Desarrollo, Chile (ANID Fondecyt de Iniciación 11200486 Principal Investigator and Corresponding Author: TRJ); ANID Fondecyt Regular 1231102; ANID ATE230065 and by ANID—MILENIO— NCS2021_013 (SocioMed).

TABLES

Table 1. Demographic characteristics of Haitian migrants in Chile and Mexico
Tabla 1. Características demográficas de los migrantes haitianos en Chile y México

Characteristic	Chile (N=207)	Mexico (N=198)	Total (N=405)
Demographic variables			
Male	110 (53.1%)	102 (51.5%)	212 (52.3%)
Female	97 (46.9%)	96 (48.5%)	193 (47.7%)
Age (years) Mean (SD)	34.08 (7.3)	33.23 (8.3)	33.66 (7.78)
Primary school completed	118 (57.0%)	156 (78.8%)	277 (67.7%)
Primary school incomplete	89 (43.0%)	42 (21.2%)	131 (32.3%)
Married/ partnered	111 (53.6%)	5 (2.5%)	116 (28.6%)
Unmarried	96 (46.4%)	193 (97.5%)	289 (71.4%)
Has children	170 (82.1%)	141 (71.2%)	311 (76.8%)
Employed	75 (36.2%)	2 (1.0%)	77 (19.0%)
Social support variables			
Having someone to trust	177 (85.5%)	101 (51.0%)	278 (68.6%)
Having someone to lend them money	129 (62.3%)	16 (8.1%)	145 (35.8%)
Having someone to take care of them while sick	183 (88.4%)	71 (35.9%)	254 (62.7%)
Having someone who shows them love/ affection	187 (90.3%)	126 (63.6%)	313 (77.3%)
Identifying with a religion	169 (81.6%)	66 (33.3%)	235 (58.0%)
Migration related variables			
Self-identified as a migrant vs. Haitians or Afro-descendent	54 (26.1%)	92 (46.5%)	146 (36.0%)
Poor Spanish proficiency	71 (34.3%)	92 (46.5%)	163 (40.2%)
Good Spanish proficiency	38 (18.4%)	51 (25.8%)	89 (22.0%)
Very good Spanish proficiency	98 (47.3%)	55 (27.8%)	153 (37.8%)
Time in the country (months) Mean (SD)	56.2 (15.25)	3.7 (5.23)	30.54 (28.68)
Dependent variables			
Depression symptoms	77 (37.2%)	183 (92.4%)	260 (64.2%)

Table 2. Bivariate analyses by depression symptoms among Haitian migrants in Chile and Mexico
Tabla 2. Análisis bivariados por síntomas de depresión en migrantes haitianos en Chile y México

	Chile (N=207)			Mexico (N=198)		
Characteristic	**Symptoms of Depression (N=77)**	**No Symptoms of Depression (N=130)**	**P value**	**Symptoms of Depression (N=183)**	**No Symptoms of Depression (N=15)**	**P value**
Social support variables						
Having someone to trust	54 (70.1%)	123 (94.6%)	p<0.001	87 (47.5%)	14 (93.3%)	p<0.001
Having someone to lend them money	40 (51.9%)	89 (68.5%)	p=0.018	13 (7.1%)	3 (20.0%)	Fisher's Exact p=0.108
Having someone to take care of them while sick	61 (79.2%)	122 (93.8%)	p=0.001	59 (32.2%)	12 (80.0%)	p<0.001
Having someone who shows them love/ affection	62 (80.5%)	125 (96.2%)	p<0.001	116 (63.4%)	10 (66.7%)	p=0.800
Identifying with a religion	56 (72.7%)	113 (86.9%)	p=0.011	61 (33.3%)	5 (33.3%)	p=1.00
Migration related variables						
Self-identified as a migrant vs. Haitians or Afro-descendent	27 (35.1%)	27 (20.8%)	p=0.024	85 (46.4%)	7 (46.7%)	p=0.987
Spanish proficiency			p=0.151			p=0.253
Poor	32 (41.6%)	39 (30.0%)		82 (44.8%)	10 (66.7%)	
Good	15 (19.5%)	23 (17.7%)		49 (26.8%)	2 (13.3%)	
Very good	30 (39.0%)	68 (52.3%)		52 (28.4%)	3 (20.0%)	
Time in the country (months) Mean (SD)	55.9 (16.9)	56.4 (14.2)	p=0.823	3.7 (5.3)	3.6 (4.15)	p=0.938
Demographic variables						
Sex			p=0.400			p = 0.883
Male	38 (49.4%)	72 (55.4%)		94 (51.4%)	8 (53.3%)	
Female	39 (50.6%)	58 (44.6%)		89 (48.6%)	7 (46.7%)	
Age (years) Mean (SD)	34.5 (6.8)	33.9 (7.6)	p=0.546	33.31 (8.4)	32.2 (7.0)	p = 0.617
Completed primary school	71 (54.6%)	47 (61.0%)	p=0.367	144 (78.7%)	12 (80.0%)	p=0.905
Married/ partnered	35 (45.5%)	76 (58.5%)	p=0.070	5 (2.7%)	0 (0%)	p=0.517
Has children	66 (85.7%)	104 (80.0%)	p = 0.300	134 (73.2%)	7 (46.7%)	Fisher's Exact p = 0.039
Employed	31 (40.3%)	44 (33.8%)	p=0.355	0 (0%)	2 (13.3%)	Fisher's Exact p=0.005

Table 3. Multivariable logistic regression model by country Chile and Mexico*
Tabla 3. Modelo de regresión logística multivariable por país Chile y México*

	Chile (N=207)				Mexico (N=198)		
Characteristic	**Adjusted Odds Ratio**	**95% CI**	**P-value**		**Adjusted Odds Ratio**	**95% CI**	**P-value**
Social support variables							
Having someone to trust	0.187	0.054 - 0.646	**0.008***		**0.080**	**0.007 – 0.858**	**0.037***
Having someone to lend them money	0.893	0.384 – 2.075	0.792		0.515	0.093 – 2.867	0.449
Having someone to take care of them while sick	1.186	0.292 – 4.812	0.812		0.167	0.027 – 1.051	0.057
Having someone who shows them love/ affection	0.269	0.070 – 1.041	0.057		4.095	0.751 – 22.334	0.103
Identifying with a religion	0.397	0.170 – 0.923	**0.032***		1.593	0.343 – 7.404	0.552
Migration related variables							
Self-identified as a migrant vs. Haitians and/or Afro-descendent	1.484	0.692 – 3.184	0.311		0.371	0.093 – 1.484	0.161
Spanish proficiency	1.369	0.925 – 2.027	0.116		0.679	0.311 – 1.482	0.331
Time in the country (months)	0.999	0.977 – 1.021	0.900		0.952	0.828 – 1.095	0.492
Demographic variables							
Sex	1.310	0.637 – 2.696	0.463		0.870	0.219 – 3.464	0.843
Age (years)	0.998	0.947 – 1.051	0.941		1.025	0.926 – 1.134	0.634
Primary school completed	1.291	0.655 – 2.543	0.460		1.993	0.370 – 10.735	0.422
Married/partnered	0.446	0.217 – 0.915	**0.028***		11527138.490	000-NA	0.999
Has children	1.699	0.616 – 4.682	0.306		4.235	1.005 – 17.855	0.049*
Unemployed	1.246	0.608 – 2.554	0.548		0.000	000 - NA	0.999

*Significant at p<0.05

REFERENCES

AbdAleati, N. S., Mohd Zaharim, N., & Mydin, Y. O. (2016). Religiousness and Mental Health: Systematic Review Study. In *Journal of religion and health,* 55(6). https://doi.org/10.1007/s10943-014-9896-1

Alden, E., & Tippett, A. (2021, October 1). *Why Are Haitian Migrants Gathering at the U.S. Border?* Council on Foreign Relations. https://www.cfr.org/in-brief/why-are-haitian-migrants-gathering-us-border

Attal, J. H., Lurie, I., & Neumark, Y. (2020). A rapid assessment of migrant careworkers' psychosocial status during Israel's COVID-19 lockdown. *Israel Journal of Health Policy Research*, *9*(1). https://doi.org/10.1186/s13584-020-00422-0

Auguste, E., & Rasmussen, A. (2019). Vodou's role in Haitian mental health. *Global Mental Health*, *6*, e25. https://doi.org/10.1017/gmh.2019.23

Ayala, M. (2022, January 3). Por asesinato de haitiano reforzarán seguridad en andador del Chaparra. *Uniradio Informa*.

Barba-Sánchez, D. (2019). On crossing deserts and hostile territories: Sources of vulnerability for Central American immigrants in Mexico. In *Center for U. S.-Mexican Studies, The migrant Caravan: From Honduras to Tijuana. An analysis by the center for the U.S.-Mexican studies fellows (2018–2019)* (pp. 13–23). Center for U.S.-Mexican Studies.

Barbato, M., & Thomas, J. (2021). In this together: Psychological wellbeing of foreign workers in the United Arab Emirates during the COVID-19 pandemic. *International Journal of Psychology*, *56*(6). https://doi.org/10.1002/ijop.12786

Bartlett, J. (2021, September 26). Why Haitians are fleeing Chile for the U.S. border. *The Washington Post*. https://www.washingtonpost.com/world/2021/09/26/chile-haitian-border-migrants/

Behrendt, M., Lietaert, I., & Derluyn, I. (2022). Continuity and Social Support: A Longitudinal Study of Unaccompanied Refugee Minors' Care Networks. *Journal of Immigrant and Refugee Studies*, *20*(3). https://doi.org/10.1080/15562948.2021.1930322

Bendixsen, S. K. N. (2020). Existential Displacement: Health Care and Embodied Un/Belonging of Irregular Migrants in Norway. *Culture, Medicine and Psychiatry*, *44*(4). https://doi.org/10.1007/s11013-020-09677-3

Bhugra, D. (2004). Migration and mental health. *Acta Psychiatrica Scandinavica*, *109*(4), 243–258.

Blukacz, A., Cabieses, B., & Markkula, N. (2020). Inequities in mental health and mental healthcare between international immigrants and locals in Chile: a narrative review. In *International Journal for Equity in Health,* 19(1). https://doi.org/10.1186/s12939-020-01312-2

Blukacz, A., Cabieses, B., Obach, A., Carreño, A., Stefoni, C., & Pérez, C. (2023). Access to health services for international migrants during the COVID-19 pandemic: a qualitative study. *Revista de Escola de Enfermagem*, *57*((spe)e20220443).

Bojorquez, I., Sepúlveda, J., Lee, D., & Strathdee, S. (2022). Interrupted transit and common mental disorders among migrants in Tijuana, Mexico. *International Journal of Social Psychiatry*, *68*(5). https://doi.org/10.1177/00207640221099419

Bourque, F., Van Der Ven, E., & Malla, A. (2011). A meta-analysis of the risk for psychotic disorders among first- and second-generation immigrants. *Psychological Medicine*, *41*(5). https://doi.org/10.1017/S0033291710001406

Boyas, J. F., Valera, P., & Ruiz, E. (2018). Subjective well-being among Latino day laborers: Examining the role of religiosity, social networks, and cigarette use. *Health Promotion Perspectives*, *8*(1). https://doi.org/10.15171/hpp.2018.06

Bradley, E. (1995). Religious Involvement and Social Resources: Evidence from the Data Set Americans Changing Lives. *Journal for the Scientific Study of Religion*, *34*(2). https://doi.org/10.2307/1386771

Breslau, J., Borges, G., Tancredi, D., Saito, N., Kravitz, R., Hinton, L., Vega, W., Medina-Mora, M. E., & 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). https://doi.org/10.1001/archgenpsychiatry.2011.21

Brunnet, A. E., Bolaséll, L. T., Weber, J. L. A., & Kristensen, C. H. (2018). Prevalence and factors associated with PTSD, anxiety and depression symptoms in Haitian migrants in southern Brazil. *International Journal of Social Psychiatry*, *64*(1). https://doi.org/10.1177/0020764017737802

Bustamante, L. H. U., Cerqueira, R. O., Leclerc, E., & Brietzke, E. (2018). Stress, trauma, and posttraumatic stress disorder in migrants: A comprehensive review. In *Revista Brasileira de Psiquiatria*, *40*(2). https://doi.org/10.1590/1516-4446-2017-2290

Carreño, A., Obach, A., & Correamatus, E. (2023). "Viajar para estar mejor": trayectorias migratorias de niños, niñas y adolescentes que han ingresado por paso no habilitado a Chile durante la crisis por COVID19. *Aiken. Revista de Ciencias Sociales y de La Salud*, *3*(1), 53–69.

Carreño Calderón, A., Correa Matus, M. E., Urrutia, C., & Cabieses, B. (2021). "Te recomiendo que esperes": burocracia y salud en solicitantes de asilo y refugiados de origen Latinoamericano en Chile. *Revista Chilena de Antropología*, *43*. https://doi.org/10.5354/0719-1472.2021.64435

Chen, Y., Rafful, C., Mercado, M., Carte, L., Morales-Miranda, S., Cheristil, J., & Rocha-Jiménez, T. (2022). Hoping for a Better Future during COVID-19: How Migration Plans Are Protective of Depressive Symptoms for Haitian Migrants Living in Chile. *International Journal of Environmental Research and Public Health*, *19*(16). https://doi.org/10.3390/ijerph19169977

Choy, B., Arunachalam, K., S, G., Taylor, M., & Lee, A. (2021). Systematic review: Acculturation strategies and their impact on the mental health of migrant populations. *Public Health in Practice*, 2, 100069 https://doi.org/10.1016/j.puhip.2020.100069

Contreras, Y. (2020). *Mis vecinas y vecinos haitianos*. https://portaluchile.uchile.cl/noticias/162924/mis-vecinas-y-vecinos-haitianos

Crocker, R. (2015). Emotional testimonies: An ethnographic study of emotional suffering related to migration from Mexico to Arizona. *Frontiers in Public Health*, 3, 177. https://doi.org/10.3389/fpubh.2015.00177

Dias, G., Silva, J. C. J., & da Silva, S. A. (2020). Travellers of the caribbean: Positioning brasília in haitian migration routes through Latin America. *Vibrant Virtual Brazilian Anthropology*, *17*. https://doi.org/10.1590/1809-43412020v17d504

Duarte, F., & Jiménez-Molina, Á. (2021). Psychological distress during the COVID-19 epidemic in Chile: The role of economic uncertainty. *PLoS ONE*, *16*(11 November). https://doi.org/10.1371/journal.pone.0251683

Duarte, F., & Jiménez-Molina, Á. (2022). A Longitudinal Nationwide Study of Psychological Distress During the COVID-19 Pandemic in Chile. *Frontiers in Psychiatry*, *13*. https://doi.org/10.3389/fpsyt.2022.744204

Duncan, W. L. (2015). Transnational Disorders: Returned Migrants at Oaxaca's Psychiatric Hospital. *Medical Anthropology Quarterly*, *29*(1). https://doi.org/10.1111/maq.12138

Economic Commission for Latin America and the Caribbean (ECLAC). (2021). Disasters and inequality in a protracted crisis: towards universal, comprehensive, resilient and sustainable social protection systems in Latin America and the Caribbean (LC/CDS.4/3). In *Economic Commission for Latin America and the Caribbean (ECLAC)*.

Eppsteiner, H. S., & Hagan, J. (2016). Religion as Psychological, Spiritual, and Social Support in the Migration Undertaking, pp- 49-70. In Saunders, J. *Intersections of Religion and Migration*. Palgrave Macmillan https://doi.org/10.1057/978-1-137-58629-2_2

Fanfan, D., Rodríguez, C. S., Groer, M., Weaver, M., & Stacciarini, J. M. R. (2020). Stress and depression in the context of migration among Haitians in the United States. *Health and Social Care in the Community*, *28*(5). https://doi.org/10.1111/hsc.13006

Faret, L., Téllez, M. E. A., & Rodríguez-Tapia, L. H. (2021). Migration Management and Changes in Mobility Patterns in the North and Central American Region. *Journal on Migration and Human Security*, *9*(2). https://doi.org/10.1177/23315024211008096

Formoso-Suárez, A. M., Saiz, J., Chopra, D., & Mills, P. J. (2022). The Impact of Religion and Social Support on Self-Reported Happiness in Latin American Immigrants in Spain. *Religions*, *13*(2). https://doi.org/10.3390/rel13020122

Frank-Vitale, A. (2020). Stuck in Motion: Inhabiting the Space of Transit in Central American Migration. *Journal of Latin American and Caribbean Anthropology*, *25*(1). https://doi.org/10.1111/jlca.12465

Galvan, T., Rusch, D., Rodríguez, M. M. D., & Garcini, L. M. (2022). Familias Divididas [Divided Families]: Transnational Family Separation and Undocumented Latinx Immigrant Health. *Journal of Family Psychology*, *36*(4). https://doi.org/10.1037/fam0000975

Gil Everaert, I. (2021). Inhabiting the meanwhile: rebuilding home and restoring predictability in a space of waiting. *Journal of Ethnic and Migration Studies*, *47*(19). https://doi.org/10.1080/1369183X.2020.1798747

Guo, Y., Chen, X., Gong, J., Li, F., Zhu, C., Yan, Y., & Wang, L. (2016). Association between spouse/child separation and migration-related stress among a random sample of rural-to-urban migrants in Wuhan, China. *PLoS ONE*, *11*(4). https://doi.org/10.1371/journal.pone.0154252

Gutierrez-Vazquez, E., Flippen, C., & Parrado, E. (2018). Migration and depression: A cross-national comparison of Mexicans in sending communities and Durham, NC. *Social Science and Medicine*, *219*, 1-10. https://doi.org/10.1016/j.socscimed.2018.09.064

Haber, M. G., Cohen, J. L., Lucas, T., & Baltes, B. B. (2007). The relationship between self-reported received and perceived social support: A meta-analytic review. *American Journal of Community Psychology*, *39*(1–2). https://doi.org/10.1007/s10464-007-9100-9

Herz, A. (2015). Relational constitution of social support in migrants' transnational personal communities. *Social Networks*, *40*. https://doi.org/10.1016/j.socnet.2014.08.001

Horst, C. (2006). Refugee Livelihoods: Providing Security or Sustaining Dependency? pp. 77-122. In Transnational nomads: How Somalis cope with refugee life in the Dadaab camps of Kenya. Berghahn Books.

Hovey, J. D., Hurtado, G., Morales, L. R. A., & Seligman, L. D. (2014). Religion-Based Emotional Social Support Mediates the Relationship between Intrinsic Religiosity and Mental Health. *Archives of Suicide Research*, *18*(4). https://doi.org/10.1080/13811118.2013.833149

IBM Corp. (2021). *IBM SPSS Statistics for Macintosh* (28.0). IBM Corp.

International Organization for Migration. (2021). *World Migration Report 2022* (IOM World Migration Report). United Nations. https://doi.org/10.18356/9789292680763

Jolof, L., Rocca, P., Mazaheri, M., Okenwa Emegwa, L., & Carlsson, T. (2022). Experiences of armed conflicts and forced migration among women from countries in the Middle East, Balkans, and Africa: a systematic review of qualitative studies. In *Conflict and Health*, 16(1). https://doi.org/10.1186/s13031-022-00481-x

Kaiser, B. N., Keys, H. M., Foster, J., & Kohrt, B. A. (2015). Social stressors, social support, and mental health among Haitian migrants in the Dominican Republic. *Revista Panamericana de Salud Publica/Pan American Journal of Public Health*, *38*(2).

Kessler, R. C., & McLeod, J. D. (1985). Social support and mental health in community samples, pp. pp. 219-240. In S. Cohen & S. L. Syme, *Social support and health*. Academic Press.

Keys, H. M., Kaiser, B. N., Foster, J. W., Burgos Minaya, R. Y., & Kohrt, B. A. (2015). Perceived discrimination, humiliation, and mental health: A mixed-methods study among Haitian migrants in the Dominican Republic. *Ethnicity and Health*, *20*(3). https://doi.org/10.1080/13557858.2014.907389

Koser Akcapar, S. (2010). Re-Thinking migrants' networks and social capital: A case study of Iranians in Turkey. *International Migration*, *48*(2). https://doi.org/10.1111/j.1468-2435.2009.00557.x

Laguerre, M. (1973). The Place of Voodoo in the Social Structure of Haiti. *Caribbean Quarterly*, *19*(3). https://doi.org/10.1080/00086495.1973.11829161

Lee, A. E. (2008). "Para salir adelante": The Emergence and Acceleration of International Migration in New Sending Areas of Puebla, Mexico. *Journal of Latin American and Caribbean Anthropology*, *13*(1). https://doi.org/10.1111/j.1548-7180.2008.00004.x

Leiler, A., Bjärtå, A., Ekdahl, J., & Wasteson, E. (2019). Mental health and quality of life among asylum seekers and refugees living in refugee housing facilities in Sweden. *Social Psychiatry and Psychiatric Epidemiology*, *54*(5). https://doi.org/10.1007/s00127-018-1651-6

Lemus-Way, M. C., & Johansson, H. (2020). Strengths and Resilience of Migrant Women in Transit: an analysis of the narratives of central American women in irregular transit through Mexico towards the USA. *Journal of International Migration and Integration*, *21*(3). https://doi.org/10.1007/s12134-019-00690-z

Lim, C., & Putnam, R. D. (2010). Religion, social networks, and life satisfaction. *American Sociological Review*, *75*(6). https://doi.org/10.1177/0003122410386686

Lin, N., Ensel, W. M., Simeone, R. S., & Kuo, W. (1979). Social support, stressful life events, and illness: A model and an empirical test. *Journal of Health and Social Behavior*, *20*(2). https://doi.org/10.2307/2136433

Martinez Tyson, D. D., Castañeda, H., Porter, M., Quiroz, M., & Carrion, I. (2011). More similar than different? Exploring cultural models of depression among latino immigrants in Florida. *Depression Research and Treatment*, *2011*. https://doi.org/10.1155/2011/564396

McLaren, F., Montalva, N., Mercado, M., Antipichun, A., & Rocha Jiménez, T. (2024). Ethics in Mental Health Research with Haitian Migrants: Lessons from a Community-Based Study in Santiago, Chile. *Ethics & Human Research*, 46(3), 16-25.

Medina-Mora, M. E., Borges, G., Lara Muñoz, C., Benjet, C., Blanco Jaimes, J., Fleiz Bautista, C., Villatoro Velázquez, J., Rojas Guiot, E., Zambrano Ruíz, J., Casanova Rodas, L., & Aguilar-Gaxiola, S. (2003). Prevalencia de trastornos mentales y uso de servicios: Resultados de la Encuesta Nacional de-Epidemiología Psiquiátrica en México. In *Salud Mental*, 26(4). https://www.redalyc.org/articulo.oa?id=58242601

Menjívar, C. (2006). Liminal legality: Salvadoran and Guatemalan immigrants' lives in the United States. In *American Journal of Sociology*, 111(4). https://doi.org/10.1086/499509

Merino, S. M. (2014). Social Support and the Religious Dimensions of Close Ties. *Journal for the Scientific Study of Religion*, *53*(3). https://doi.org/10.1111/jssr.12134

Moreno, O., Ortiz, M., Fuentes, L., Garcia, D., & Leon-Perez, G. (2020). Vaya con dios: The influence of religious constructs on stressors around the migration process and U.S. lived experiences among latina/o immigrants. *International Journal of Environmental Research and Public Health*, *17*(11). https://doi.org/10.3390/ijerph17113961

Mulvaney-Day, N. E., Alegría, M., & Sribney, W. (2007). Social cohesion, social support, and health among Latinos in the United States. *Social Science and Medicine*, *64*(2). https://doi.org/10.1016/j.socscimed.2006.08.030

Organización Internacional para las Migraciones (OIM). (2022). *Caracterización de la Población de Origen Haitiano en México*. https://mexico.iom.int/sites/g/files/tmzbdl1686/files/documents/pdf-dtm-final_06_03_2022.pdf

Plasencia, M. Z. (2021). "I Don't Have Much Money, but I Have a Lot of Friends": How Poor Older Latinxs Find Social Support in Peer Friendship Networks. *Social Problems*. 70(3), 755-772. https://doi.org/10.1093/socpro/spab081

Pourhoseingholi, M. A., Vahedi, M., & Rahimzadeh, M. (2013). Sample size calculation in medical studies. *Gastroenterology and Hepatology from Bed to Bench*, *6*(1).

Prati, G., & Pietrantoni, L. (2010). The relation of perceived and received social support to mental health among first responders: A meta-analytic review. *Journal of Community Psychology*, *38*(3). https://doi.org/10.1002/jcop.20371

Quesada, J., Hart, L. K., & Bourgois, P. (2011). Structural vulnerability and health: Latino migrant laborers in the United States. *Medical Anthropology: Cross Cultural Studies in Health and Illness*, *30*(4). https://doi.org/10.1080/01459740.2011.576725

R Core Team. (2022). *R: A language and environment for statistical computing* (4.2.2). R Foundation for Statistical Computing.

Radloff, L. S. (1977). The CES-D Scale: A Self-Report Depression Scale for Research in the General Population. *Applied Psychological Measurement*, *1*(3). https://doi.org/10.1177/014662167700100306

Revens, K. E., Gutierrez, D., Paul, R., Reynolds, A. D., Price, R., & DeHaven, M. J. (2021). Social Support and Religiosity as Contributing Factors to Resilience and Mental Wellbeing in Latino Immigrants: A Community-Based Participatory Research Study. *Journal of Immigrant and Minority Health*, *23*(5). https://doi.org/10.1007/s10903-021-01179-7

Rivera, S. (2021). Community group sends help across border as thousands of fellow Haitians arrive in Tijuana. *Fox40*. https://fox40.com/news/community-group-sends-help-across-border-as-thousands-of-fellow-haitians-arrive-in-tijuana/

Rocha Jiménez, T., & Lazos, K. (2022). From Santiago to Tijuana: the long journey Haitians undertake. *Nexos: Migrant Observatory*. https://migracion.nexos.com.mx/2022/01/de-santiago-a-tijuana-el-largo-viaje-que-emprenden-los-haitianos/

Ryan, L. (2021). Telling network stories: researching migrants' changing social relations in places over time. *Global Networks*, *21*(3). https://doi.org/10.1111/glob.12295

Santero, M., Daray, F. M., Prado, C., Hernández-Vásquez, A., & Irazola, V. (2019). Association between religiosity and depression varies with age and sex among adults in South America: Evidence from the CESCAS I study. *PLoS ONE*, *14*(12). https://doi.org/10.1371/journal.pone.0226622

Schafer, J. L., & Graham, J. W. (2002). Missing data: Our view of the state of the art. *Psychological Methods*, *7*(2), 147–177. https://doi.org/10.1037/1082-989X.7.2.147

Schapendonk, J. (2015). What if Networks Move? Dynamic Social Network in the Context of African. *Population, Space and Place*, *21*(8), 809-819.

Schapendonk, J., van Liempt, I., Schwarz, I., & Steel, G. (2020). Re-routing migration geographies: Migrants, trajectories and mobility regimes. *Geoforum*, *116*, 211-216. https://doi.org/10.1016/j.geoforum.2018.06.007

Schlechter, P., Rodriguez, I. M., Morina, N., Knausenberger, J., Wilkinson, P. O., & Hellmann, J. H. (2021). Psychological distress in refugees: The role of traumatic events, resilience, social support, and support by religious faith. *Psychiatry Research*, *304*, 114121. https://doi.org/10.1016/j.psychres.2021.114121

Servicio Jesuita a Migrantes. (2020). *Migración en Chile. Anuario 2019, un análisis multisectorial*. https://www.migracionenchile.cl/wp-content/uploads/2020/06/MIGRACION-EN-CHILE-V7.pdf

Silva, N. Da, Dillon, F. R., Verdejo, T. R., Sanchez, M., & De La Rosa, M. (2017). Acculturative Stress, Psychological Distress, and Religious Coping among Latina Young Adult Immigrants. *Counseling Psychologist*, *45*(2). https://doi.org/10.1177/0011000017692111

Siriwardhana, C., Ali, S. S., Roberts, B., & Stewart, R. (2014). A systematic review of resilience and mental health outcomes of conflict-driven adult forced migrants. In *Conflict and Health,* 8(1). https://doi.org/10.1186/1752-1505-8-13

Spiritus-Beerden, E., Verelst, A., Devlieger, I., Primdahl, N. L., Guedes, F. B., Chiarenza, A., De Maesschalck, S., Durbeej, N., Garrido, R., de Matos, M. G., Ioannidi, E., Murphy, R., Oulahal, R., Osman, F., Padilla, B., Paloma, V., Shehadeh, A., Sturm, G., van den Muijsenbergh, M., Derluyn, I. (2021). Mental health of refugees and migrants during the covid-19 pandemic: The role of experienced discrimination and daily stressors. *International Journal of Environmental Research and Public Health*, *18*(12). https://doi.org/10.3390/ijerph18126354

Steele, D. (2018). Higher Education and Urban Migration for Community Resilience: Indigenous Amazonian Youth Promoting Place-Based Livelihoods and Identities in Peru. *Anthropology and Education Quarterly*, *49*(1). https://doi.org/10.1111/aeq.12233

Tardy, C. H. (1985). Social support measurement. *American Journal of Community Psychology*, *13*(2). https://doi.org/10.1007/BF00905728

Taylor, L. (2022). The growing health crisis on the world's most perilous migrant crossing. *BMJ (Clinical Research Ed.)*, 376:o419. https://doi.org/10.1136/bmj.o419

Temores-Alcántara, G., Santillanes-Allande, N., Infante-Xibille, C., Caballero, M., & Flores-Palacios, F. (2015). Salud mental de migrantes centroamericanos indocumentados en tránsito por la frontera sur de México. *Salud Pública de México*, *57*(3). https://doi.org/10.21149/spm.v57i3.7561

UNHCR. (2016). *Report on the situation of migrants in transit*. https://www.ohchr.org/en/documents/reports/ahrc3135-report-situation-migrants-transit

Virupaksha, H. G., Kumar, A., & Nirmala, B. P. (2014). Migration and mental health: An interface. In *Journal of Natural Science, Biology and Medicine,* 5(2). https://doi.org/10.4103/0976-9668.136141

Walther, L., Fuchs, L. M., Schupp, J., & von Scheve, C. (2020). Living Conditions and the Mental Health and Well-being of Refugees: Evidence from a Large-Scale German Survey. *Journal of Immigrant and Minority Health*, *22*(5). https://doi.org/10.1007/s10903-019-00968-5

Ward, K. P., Shaw, S. A., Chang, M., & El-Bassel, N. (2018). Social Support Moderates the Association Between Traumatic Life Events and Depression Among Migrant and Nonmigrant Men in Almaty, Kazakhstan. *Journal of Traumatic Stress*, *31*(5). https://doi.org/10.1002/jts.22324

Warner, F. R. (2007). Social Support and Distress among Q'eqchi' Refugee Women in Maya Tecún, Mexico. *Medical Anthropology Quarterly*, *21*(2). https://doi.org/10.1525/maq.2007.21.2.193

Waters, M. C., & Kasinitz, P. (2021). Race, legal status & social mobility. *Daedalus*, *150*(2). https://doi.org/10.1162/DAED_a_01850

Watkins, L., McLaren, F., Carte, L., Olivaria, C., Lazos, K., Martinez-Pereira, A., & Rocha-Jiménez, T. (2023). *'I didn't want to tell': The effects of migration trajectories on the physical and mental health of Haitian populations in Chile and Mexico*.

Wissink, M., Düvell, F., & Mazzucato, V. (2020). The evolution of migration trajectories of sub-Saharan African migrants in Turkey and Greece: The role of changing social networks and critical events. *Geoforum*, *116*. DATA MISSING https://doi.org/10.1016/j.geoforum.2017.12.004

Wurtz, H. M. (2022). Mobility Imaginaries of Humanitarian Intervention: Gender, Migration, and Violence along Mexico's Southern Border. *Medical Anthropology Quarterly*, *36*(4). https://doi.org/10.1111/maq.12716

Yates, C. (2021, September 30). Haitian Migration through the Americas: A Decade in the Making. *Migration Policy Institute*. https://www.migrationpolicy.org/article/haitian-migration-through-americas

Yeary, K. H. C. K., Ounpraseuth, S., Moore, P., Bursac, Z., & Greene, P. (2012). Religion, social capital, and health. *Review of Religious Research*, *54*(3). https://doi.org/10.1007/s13644-011-0048-8

Zimmerman, C., Kiss, L., & Hossain, M. (2011). Migration and Health: A Framework for 21st Century Policy-Making. *PLoS Medicine*, *8*(5). https://doi.org/10.1371/journal.pmed.1001034

Received 25 Ago 2023
Accepted 22 Dec 2023