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ORIGINAL PAPER

Factores internos que afectan a las remesas

Depression Among Mexican Men on the Migration Frontier: The Role of Family Separation and Other Structural and Situational Stressors

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PRESIÓN SOCIAL Y PERCEPCIÓN DE LA MIGRACIÓN

Abstract This study documents the mental health of Mexican migrant men in a new non-traditional settlement in the Rocky Mountain West and examines the role of family separation and other structural and situational stressors in relation to depressive symptoms. Using a community-based participatory research approach, we conducted interviewer-assisted surveys with 134 Mexican migrant men. Findings revealed that, overall, 46 % of participants reported depressive symptoms in the range for clinical concern and that single and married men who were separated from their families were particularly vulnerable to poor mental health. Best predictors of depression included both structural stressors (family separation, sending remittances to Mexico) and situational stressors (fearfulness, worry about police confrontation, treatment by non-Latinos, and lack of support). These findings highlight the need for complex and contextually-sensitive mental health interventions designed to protect this vulnerable population on the migration frontier and to promote their mental health.

Keywords Mexican immigrant men · New settlements · Mental health · Family separation

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Introduction

aspectos sociales

While Latina migrants are often cited in the literature for being at risk for poor mental health [1, 2], research investigating mental health among Latino migrants to new settlements suggests that some men may also be at risk for elevated levels of depressive symptoms [3, 4]. Indeed, studies of migrant Latino farmworkers in the upper Midwest and North Carolina with samples comprised of nearly all men have found that 40 % of farmworkers reported experiencing depression symptomatology in the range for clinical concern [3, 4].

Several studies point to family separation as a risk factor for migrant Latino mental health, as men may struggle emotionally when faced with the tradeoff of staying in their home countries or leaving their families behind to work and provide from afar [5, 6]. Separation from family, in addition to other structural and situational stressors, may compromise migrant men's mental well-being and may exacerbate disparate health outcomes in an already vulnerable population. Few studies have examined the mental health of Latino men in new settlements on the migration frontier, even though these men face myriad health threats [5]. Thus, the goals of this study are to examine overall depression levels among Mexican migrant men in a new rural settlement as a function of their family configuration and to delineate selected structural and situational stressors as a basis for variation in depression symptoms.

Background

Since the 1990s, the most rapid relative growth in the migrant population—and especially among undocumented migrants—has occurred in new, often rural destinations where the foreign-born population has been historically

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small [7–11]. Montana is one of those new destinations. Between 2000 and 2010, Montana experienced 68 % growth in its Latino population (the vast majority from Mexico) and the Gallatin County (this study's primary location) experienced 136 % growth [12]. However, Montana is not just rural; it is frontier. It is the 4th largest state in the US with a total population of just over one million people [13].

Frontier Mexican migrants settling in the Rocky Mountain West encounter a distinctively challenging context characterized by very limited employment opportunities; a weak social service, health care, and educational base with few to no Spanish speaking personnel or English language programs; a hostile culture of nativism (i.e., a majority culture that opposes immigration); large geographic expanses with virtually no public transportation; reports of police profiling on the roadways; and a "strongly felt" Immigration and Customs Enforcement (ICE) presence. This context limits Mexican migrant access to resources and social networks that they have traditionally relied upon to care for themselves and their families [14–16].

contextos donde hay bajas probabilidades de sostener a sus familias después de haber logrado irse.

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The salience of family in Latino culture is well-documented [17] as is the influence of families on individual health outcomes [18]. Less understood is how migrant men negotiate family life under current US immigration policies and how their mental health is affected, especially in new settlements. In recent years, US border control policies aimed at reducing unauthorized immigration from Mexico have resulted in less flexible migratory patterns. Once workers have successfully crossed the border, they are less likely to return to their families in Mexico [19]. Instead, many migrants now cross the border as families or workers send for their families once they are settled in the US [8, 15]. Those who do leave family behind may experience longer periods of separation, as stays of undocumented Mexican migrants have increased from an average of 3 years to nearly a decade [19]. Expanded US enforcement policies resulting in massive deportations have further strained transnational families and heightened fears in immigrant communities [20]. Family separation has been linked with both physical and psychological poor health, unhealthy behaviors [21], elevated levels of stress [22–24], and psychological ambivalence [25]. In this study, we examine Mexican migrant men's experiences of family separation in new frontier settlements and how separation, among other stressors, relates to men's mental health.

Theoretical/Conceptual Framework: Stress and Migrant Mental Health

Migrants to new settlements confront a myriad of stressors that likely affect their mental health [5, 8]. Stressors can be understood as structural or relatively enduring and as situational. Structural stressors are generally tied to individuals' social location and are stable and persistent over time [5]. Although structural stressors can be influenced by social-political and economic forces [19], here we are delineating stressors based on their underlying temporal structures, which can have disparate effects on short- and long-term mental health outcomes [5, 26].

Family separation experienced by Mexican migrants can be considered as an enduring, long-term stressor, particularly given the more restrictive US policies hindering movement across borders today [6, 19, 20]. We also characterize the sending of remittances back to Mexico as a structural stressor, as many migrants' come to the US seeking to overcome persistent market failures back home and to provide financial stability and economic opportunity for their families [27]. Other enduring structural stressors linked to mental health include documentation status and acculturation. Although acculturation is often conceptualized as a bidimensional process [28], it is frequently operationalized as a composite of one's nativity, length of time in the US and English proficiency—all highly stable, structural stressors likely to influence mental health outcomes [5].

Factore s socio-cultural es

In addition to structural, enduring stressors, situational stressors also should be considered when examining migrant mental health. Situational stressors are "more labile in nature" as exposure and appraisal can vary depending upon individual circumstances and environmental conditions [5]. Situational stressors can change based on one's situatedness and might include perceptions of discrimination, documentation stress (fears and worries about the police or ICE, being deported, and separated from family), and social support. Each of these situational stressors has been associated with depression outcomes, where perceived discrimination, documentation stress, and limited support have been linked to elevated depression symptoms [29–33].

Methods

Conducting research with vulnerable, hidden, and hard-to-reach populations, such as Mexican migrants to new frontier settlements, can be challenging. Community-based participatory research (CBPR) approaches are recognized as essential for building trusted university-community partnerships [16, 34, 35] and emphasize "health promotion and disease prevention *with and for* the public rather than *on* the public" [36]. Following core CBPR principles, this research program, begun in 2007, was guided by a community advisory board (CAB) made up of Mexican migrant community members, local community organizers, health practitioners, and university researchers who participated in every aspect of the project [34, 35]. Over the course of

6 years, the research team and CAB established trusted relationships, identified community health concerns, developed study protocols, translated and piloted measures, trained interviewers, recruited participants, analyzed and disseminated results, and took action steps to support migrant health [16].

Participants

Between 2009 and 2011, 210 in-person interviewer-assisted surveys were conducted with migrant men and women who were born in Mexico, were 18 years or older, were not US citizens, and were residing within a 220-miles radius of the university. For the purposes of the current study, we excluded the female participants from the analysis, resulting in a total sample of 134 men. Participants reported living in the US <1–39 years in duration, with a median length of time in the US of 7 years (See Table 1). The majority (72 %) reported speaking at least some English. Ages of participants ranged from 18 to 58 with a mean of 32 years. All but 8 participants stated that they were employed, working full-time primarily in one of four areas: construction (54 %; masonry, painting, dry walling, carpentry, roofing); restaurant (17 %; cooks, dishwashers, servers); housekeeping (13 %); and agricultural (11 %; ranching, dairy, potato). Approximately half of the sample was married (54 %) and had at least one child (58 %); however, 63 % of participants reported living in Montana alone, separated from their family.

Data Collection

The research team, CAB members, and community organizers used snowball sampling techniques to reach out to Mexican migrant community members residing in one of six "new" immigrant communities in southwest Montana. Recruitment began by identifying migrant community members affiliated with the CAB's social networks (including a local Catholic church offering a monthly Spanish mass) and then snowballing from this initial group. Because we were concerned about deportation risks for undocumented participants, we did not advertise the study and moved cautiously during the recruitment phase, spreading word about the study person to person and meeting participants in places they identified as safe.

All interviews were conducted in person and in Spanish by five bilingual women who were identified by the CAB to be known and trusted members of the immigrant community. Interviewers were trained by the research team and received a stipend for their work. Study methods received approval from the university IRB committee, and all participants were read a consent form in Spanish detailing the

Table 1 Characteristics of the sample as a function of family configuration (N = 134)

	(1) Single Unaccompanied Men (n = 59)	(2) Married Accompanied Men (n = 26)	(3) Married Accompanied Men (n = 49)	Statistic	Post Hoc test
Means (standard deviations) or number (percentage)					
Demographic characteristics					
Age	26.32 (7.1)	38.52 (9.1)	35.00 (8.4)***	$F(2, 130) = 25.4$	1 < 2, 3
Education (in years)	10.33 (3.3)	7.33 (4.2)	8.32 (3.9)***	$F(2, 129) = 7.1$	1 > 2, 3
Married (in years)	NA	15.51 (9.4)	9.63 (7.6)**	$t(65) = 2.8$	
Children (% yes)	11 (19.3)	22 (88.0)	44 (89.8)***	$\chi2 = 64.9$	
Structural stressors					
Send remittances (% yes)	51 (87.9)	24 (92.3)	34 (69.4)**	$\chi2 = 8.5$	
Length of time in US (in years)	5.87 (5.1)	10.97 (10.2)	13.26 (8.4)***	$F(2, 131) = 13.4$	1 < 2, 3
English proficient (% yes)	40 (67.8)	18 (69.2)	39 (79.6)	$\chi2 = 2.0$	
Situational stressors					
Perceived fear (0–10 scale)	2.59 (2.6)	3.27 (3.3)	2.55 (2.8)	$F(1, 131) = 0.6$	
Worry about police (% yes)	33 (55.9)	12 (46.2)	26 (53.1)	$\chi2 = 0.7$	
Treatment by non-Latinos (0–2 scale)	1.79 (0.5)	1.63 (0.6)	1.72 (0.5)	$F(2,119) = 0.8$	
Social support (0–10 scale)	4.25 (2.8)	4.65 (3.6)	4.58 (3.1)	$F(2, 130) = 0.2$	
Mental health					
Depression score	10.00 (3.4)	9.96 (5.8)	7.10 (4.8)**	$F(2,131) = 6.4$	3 < 1, 2

*** $p < .001$; ** $p < .01$; * $p < .05$; † $p < .10$

potential risks and benefits of study participation. We did not require participant signatures on the consent forms as we did not want any identifying information associated with study results. The questionnaire was 14 pages in length and took on average 45–60 min to complete. All participants received a $20 gift card for their efforts.

Measures

Independent Variables

Demographic characteristics included the continuous variables of age at time of interview and highest grade of education completed in years. Participants were also asked about certain family and work-related variables, including their marital status (married/partnered = 1, else = 0), length of time married in years, if they were accompanied by their spouse, if they had a child(ren) (yes = 1, 0 = no), and if they worked for pay (yes = 1, no = 0).

Structural Stressors

To examine family configurations, three groups were formed. Men who were not married/partnered were coded as "single, unaccompanied" (1). Men who reported that they were married without accompanying spouse in Montana were coded as "married, unaccompanied" (2). Men who were married and living with their spouses in Montana were coded "married, accompanied" (3). A variable "separation from family" was created to capture those men living here unaccompanied (1) versus those living with an accompanying spouse or mate (0). Participants were also asked if they sent remittances back to Mexico (yes = 1, no = 0). Other structural stressors included length of time in the US in years, and a dummy coded variable, ability to speak English (where 1 = can speak at least some English, 0 = no English spoken).

Situational Stressors

Perceptions of fear and worry were assessed by asking participants "On a scale from 0 to 10, how fearful are you living in Montana where 0 = not at all fearful and 10 = very fearful?" and "How much do you worry about the police confronting you?" The latter question included response options, "Nunca/Never" (0), "A veces/Sometimes" (1), and "Seguido/Often" (2); this item was dummy code such that any positive response of worry about the police = 1, else 0. Participants were also asked about perceived treatment by various groups, including non-Latinos (response options included "Bien/Good" (2), "Regular" (1), and "Mal/Badly" (0)) and, as an indicator of social support, about the number of people they can count on in times of need, on a scale from 0 to 10 or more people.

Dependent Variable

To measure depression, we utilized an abbreviated 10-item version of the Center for Epidemiologic Studies-Depression (CES-D) measure [37, 38]. This measure rates symptoms of depression during the last 7 days (e.g., "Me sentí solo/a" or "I felt lonely") on a scale ranging from 0 (never or rarely) to 3 (almost all the time). Two items (happy, enjoyed life) were inversely recoded and then all 10 items were summed to compute a total scale score. Higher scores indicate greater depression symptoms, with a cutoff point of 10 indicating risk for serious depression in adults. Previous studies with Mexican migrant farmworkers indicate the 10-item CES-D short form has acceptable internal consistency and accounts for 78.3 % of the variance in scores from the full CES-D [39]. Scale internal consistency for this study yielded a Chronbach alpha of .73, suggesting its suitability for use with our participants.

Analysis

Descriptive statistics were used to examine the distributions of all study variables. Next, oneway ANOVAs were run with Bonferonni post hoc tests to examine continuous variables as a function of family configuration (with one exception: For length of time married, a t test was used to compare the number of years unaccompanied and accompanied married men were wed). For categorical variables, cross tabulations and Chi square tests were used to examine counts and percentages as a function of the three family configuration groups. Next, correlation coefficients of all study variables were examined and hierarchical regression analyses were run to determine the best demographic (age, education), structural (family separation, remittances, length of time in US, and English proficiency) and situational (perceived fear, worry about police, treatment by non-Latinos, and support) predictors of depression scores. All data analyses were performed using SPSS 20 and $p < .05$ was considered statistically significant.

Results

Table 1 presents descriptive statistics for all study variables as a function of family configuration. The depression scores revealed that 46 % of respondents scored above the 10-point cutoff for clinical concern for depression in adults. However, as compared to both unaccompanied (35 %) and accompanied married men (33 %), single men (61 %) were significantly more likely to report experiencing depression

symptoms in the range for clinical concern (not shown in table). Examining depression mean scores, accompanied married men reported the lowest depression scores as compared to unaccompanied men. Regarding demographic and stressor characteristics, single men were significantly younger, had significantly more years of education, and were in the US for significantly fewer years than either group of married men. Both unaccompanied groups of men were more likely to send remittances home to Mexico than their accompanied married counterparts. There were no other significant differences found across the groups of men.

Bivariate results indicated that depression was negatively related to certain family characteristics, such as marital status and the presence of children, where depression scores were lower among migrant men who were married and had children (see Table 2). Depression was significantly positively related to being in the US alone and sending remittances to Mexico, a potential indicator of the strain of familial separation and the hardship of providing economically from afar. Living in the US for more years and the ability to speak English were negatively correlated with depression scores among migrants to a non-traditional receiving site.

Migrant men who experienced more fearfulness (including fear of being deported, fear of *la migra*/ICE, and fear of losing their economic footing) and who reported worrying about police confrontation were significantly more likely to also report experiencing heightened depression symptoms. Results further indicated that while depression scores were not significantly related to treatment by non-Latinos in the community (a negative trend only), depression scores were significantly negatively related to social support, such that depression scores decreased as men could count on more people for help in times of need.

Hierarchical regression analyses of the ability of structural and situational stressors to account for the variation in depression scores are presented in Table 3. Controlling for age and education level, structural stressors included in Model 2 accounted for 10 % of the variance in depression scores, with family separation and sending remittances home as best predictors. In Model 3, the inclusion of situational stressors explained an additional 20 % of the variance in depression scores (for a total adjusted R-square of 0.32). In the final model, best predictors (in order of Beta weights) included worry about police, separation from family, sending remittances, fearfulness, lack of support, and poor treatment by non-Latinos.

Discussion

Consistent with the few extant studies of mental health among immigrant men residing in new settlements [3, 4],

Table 2 Correlations of study variables

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Age	–	−.28**	.53**	.56**	−.26**	−.13	.67**	.08	.02	−.11	.08	.13	−.14
2. Education		–	−.25**	−.25**	.13	.02	−.31**	.25**	−.12	−.09	.12	−.02	−.09
3. Married (1 = yes)			–	.72**	−.71**	−.16†	.41**	.06	.05	−.06	−.06	.09	−.22*
4. Children (1 = yes)				–	−.49**	−.10	.36**	.02	.02	−.05	−.05	.02	−.20*
5. Separated from family (1 = yes)					–	.25**	−.34**	−.12	.04	−.01	.02	−.03	.30**
6. Send remittances (1 = yes)						–	−.29**	−.12	.06	.07	.03	.16†	.29**
7. Time in US							–	.26**	−.15†	−.15†	−.04	.28**	−.27**
8. English proficient (1 = yes)								–	−.23**	−.11	−.11	.17*	−.25**
9. Perceived fear									–	.36**	.04	−.01	.26**
10. Worry about police (1 = yes)										–	.00	−.15†	.28**
11. Treatment by non − Latinos											–	.04	−.16†
12. Social support												–	−.29**
13. Depression													–

† $p < .10$; * $p < .05$; ** $p < .01$

Table 3 Summary of hierarchical regression analysis predicting depression

Variables	Model 1			Model 2			Model 3		
	B	SE	β	B	SE	β	B	SE	β
Demographics									
Age	−0.078	0.04	−.161†	0.00	0.05	.000	−0.01	0.05	−.004
Education	−.015	0.11	−.131	−0.15	0.11	−.134	−0.04	0.09	−.038
Structural stressors									
Separated from family (1 = yes)				1.77	0.85	.194*	2.11	0.76	.232**
Remittance (1 = yes)				2.52	1.05	.223*	2.40	0.93	.213*
Length of time in US				−0.05	0.07	−.098	0.03	0.06	−.063
English proficient (1 = yes)				−0.93	0.96	−.091	−0.70	0.88	−.069
Situational stressors									
Perceived fear							0.31	0.14	.196*
Worry about police confrontation (1 = yes)							2.44	0.75	.277***
Treatment by non-Latinos							−0.24	0.12	−.166*
Social support							−1.55	0.65	−.187*
Model R^2	0.03			0.17			0.38		
Adjusted R^2	0.02			0.12			0.32		
Model F	1.89			3.72*			6.47***		

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

this study also found that nearly half (46 %) of participant Mexican migrant men reported elevated levels of depressive symptoms, suggesting that migrant men to new settlement areas are likely to be at elevated risk for poor mental health outcomes. Those men who were separated from their families (regardless of marital status) experienced greater depressive symptomatology than married men accompanied by their spouses. Single men in rural-frontier places alone were particularly at-risk for elevated depression levels. In this study, single men reported depression in the range for clinical concern at nearly twice the rate of married men. However, it is important to note that nearly all of the participants were employed (94 %) and actively sending remittances back to Mexico (82 %), suggesting that, despite symptomatology, they were functional, able to keep a job in a demanding new environment, and contribute to their families financially. Such findings call for continued research to assess the cultural and ecological validity of depression measures used to assess migrant men's mental health as well as the ways in which migrant men experience depression, cope, adapt, and make meaning of their lived experiences in new settlements. It appears that migrant men, and especially unaccompanied men, who are likely otherwise healthy, take a mental health hit in new rural-frontier destinations.

In the immigration literature and in the current study, family separation has emerged as an important factor for overall well-being [5, 6, 23, 25], yet we continue to know little about men's familial experiences. Migrant men separated from their families may experience harsher living contexts (e.g., overcrowded housing) and feel greater pressure to send remittances back to their families in Mexico [19, 27]. Indeed, both family separation and remittances were significant structural stressors related to depression in this study. Families experiencing immigration "intact" may benefit from a shared sense of solidarity, better living conditions, emotional encouragement, shared motivation to successfully navigate the employment and health care systems in the US, and less pressure to send remittances [6]. Unaccompanied men in new settlements are likely highly motivated to repatriate a significant amount of their earnings back home to bolster their family's economic base [27], yet being separated from family and sending remittances appear to have significant mental health consequences for migrant men.

Beyond salient structural stressors, this study also found that situational stressors accounted for a significant share of men's mental health burden. The climate or context of one's immigration experiences appears to be very important to mental well-being. We found that heightened feelings of fearfulness (i.e., fear of being deported, fear of losing one's economic footing, fear of being separated from family), worrying about police confrontation, not having adequate supports in times of need, and experiencing poor treatment by non-Latinos were all significantly related to elevated depression symptoms. These findings suggest that the context or situatedness of migrant men matters for health and further suggest that interventions aimed at improving the immigration climate may be

essential to ameliorating poor mental health and promoting health equity among migrant men to new settlements.

New Contribution to the Literature

This is one of the first studies to examine the mental health of Mexican migrant men settling in the Rocky Mountain West and to explore the salience of family separation and other structural and situational stressors for men's mental well-being. Mexican migrants to rural-frontier places face myriad challenges, including a hostile climate of nativism and significant threats of deportation [20]. As a result, migrants often live on the margins, are hidden and isolated, and hard to locate. They also have limited access to health care, especially mental health practitioners who speak Spanish, and have very limited ability to address the conditions that threaten their health [5].Using a CBPR approach and a snowball sampling strategy worked well to build trust and to grow our sample by constantly networking in the community to locate new migrants [16]. While we acknowledge that such strategies limit generalizability, study findings nonetheless document the complex array of structural and situational stressors that shape depressive symptomatology and migrant men's health on the migration frontier.

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