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Kathleen A. O'Connor

Robert L. Anders

Hector Balcazar

Jorge Ibarra

Eduardo Perez

See next page for additional authors

Authors

Kathleen A. O'Connor, Robert L. Anders, Hector Balcazar, Jorge Ibarra, Eduardo Perez, Luis Flores, Melchor Ortiz, and Nathaniel H. Bean

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Kathleen O'Connor, PhD,
University of California, Davis

Robert L. Anders, Dr Ph, CS, CNAA,
University of Texas at El Paso

Hector Balcazar, PhD,
University of Texas at Houston El Paso Regional Campus, El Paso

Jorge Ibarra, MD, MPH,
University of Texas, El Paso

Eduardo Perez, PhD,
Universidad Autónoma de Ciudad Juárez; Juárez, Chihuahua, Mexico

Luis Flores, Dr CSP,
Instituto Mexicano de Seguridad Social; Juárez, Chihuahua, Mexico

Melchor Ortiz, PhD, and
University of Texas School of Public Health, El Paso

Nathaniel H. Bean
University of Texas, El Paso

Abstract

The purpose of this paper is to (a) examine the results of a binational study of two *colonias* near El Paso, Texas, and Ciudad Juarez, Mexico, focusing on mental health and (b) analyze those results in relation to the existing literature on Hispanic mental health to determine how border regions compare with Hispanic enclaves in nonborder regions. We focus on gender, birthplace, length of residency, and level of acculturation correlated with self-reported diagnoses of depression in our analysis. Our survey instrument incorporates portions of the Behavioral Risk Factor and Surveillance Survey; the SF36, version 2; and the CAGE scale for alcohol use and abuse. We found that birthplace, acculturation, and length of residency at the border did not correlate in the same ways to mental health issues as in nonborder regions.

Although the literature on Hispanic mental health in Hispanic communities in the United States is fairly extensive, less is known about the mental health indicators of border regions (Marin, Escobar, & Vega, 2006). In this paper, we analyze self-reported lifetime depression,

Correspondence regarding this article should be directed to Kathleen O'Connor, PhD, University of California, Davis, Department of Public Health Sciences, One Shields Avenue, Davis, CA 95616. kathleen_oconnor@post.harvard.edu.

based on physician's diagnoses, among two populations living in underserved *colonias* on the U.S.–Mexico border. We examine responses regarding depression in correlation with responses to four other profiles: birthplace, length of residency, acculturation levels, and gender. We compare our data with other research among Hispanics in nonborder communities in the United States that has shown birthplace, residency, and acculturation to be correlated with negative mental health outcomes. Our binational participant cohort was drawn from residents of two *colonias:* one, San Elizario, is located near El Paso, Texas, just inside the United States; the other, Felipe Angeles, is located just inside Mexico on the outskirts of Ciudad Juarez, within sight of El Paso and the University of Texas at El Paso. We discovered that rates of reported mental health issues in these border communities differ from those found in previous studies among Hispanic immigrant communities in the interior of the United States, leading us to conclude that mental health issues unique to the border region remain essentially unaddressed in the literature on Hispanic mental health. Risk factors and mental health indicators specific to the border warrant further investigation.

Background and Literature Review

Much of the literature on Hispanic mental health draws on three major prevalence studies of Hispanic immigrants living in the United States: the 1985 Epidemiologic Catchment Area Survey of Mental Disorders (ECA; U.S. Department of Health and Human Services, 1980–1985); the 1990–1992 National Comorbidity Survey (NCS; Harvard Medical School, 2005; Kessler, 1990–1992), in which only English speakers were interviewed; and, for California Hispanics, the Mexican American Prevalence and Services Survey (MAPSS; Escobar, 1998; Escobar, Nervi, & Gara, 2000; Vega, Kolody, et al., 1998). Most of these prevalence studies measure lifetime prevalence of any psychiatric disorder among Hispanic immigrants living inside the United States but not specifically along the U.S.–Mexico border. Methods of determining lifetime prevalence differ in each study: diagnostic survey instruments were developed for the NCS and ECA, and the MAPSS study employed trained nonclinicians in the use of the Composite International Diagnostic Interview developed by the World Health Organization (WHO-CIDI; Harvard Medical School, 2004). The advantage of the WHO-CIDI is that it provides a standardized basis for comparison among diagnoses and can be administered by nonclinicians. The major drawback of the NCS study is that participant cohort was drawn only from English speakers, excluding a significant proportion of Hispanic immigrants to the United States at the risk of underreporting of health issues (Breslau et al., 2005; Burnam, Hough, Karno, Escobar, & Telles, 1987; Escobar, 1998; Escobar et al., 2000; Harvard Medical School, 2005; Vega, Kolody, et al., 1998).

The literature shows that poverty, immigration status, birthplace, barriers to care (linguistic and structural), discrimination, access to services, lack of services, lack of insurance, work-related stress, stigma, acculturation, rural/urban residency, length of residency, and weakened social support are important risk factors in Hispanic mental health (see, e.g., Cabassa, Zayas, & Hansen, 2006; Escobar et al., 2000; Kim-Godwin & Bechtel, 2004; Lara, Gamboa, Kahramanian, Morales, & Bautista, 2005; Roberts, 1980; Rohrer, Borders, & Blanton, 2005; Vega, Alderete, Kolody, & Aguilar-Gaxiola, 1998; Vega, Kolody, Aguilar-Gaxiola, & Catalano, 1999; Vega, Kolody, Hough, & Figueroa, 1987; Vega & Lopez, 2001; World Health Organization World Mental Health Survey Consortium, 2004). Of these

mental health risk factors among Hispanics reported in the literature, birthplace, acculturation, and length of residency are within the scope of our survey and are examined more closely here.

Differences in health indicators and outcomes between foreign- and U.S.-born Hispanic immigrants are commonly known as the "Hispanic health paradox," a phenomenon in which poverty-level immigrants to the United States arrive with better health indicators than both their U.S.-born counterparts and non-Hispanic Whites, only to suffer from significantly declining health over subsequent generations. The basis for the notion of a "paradox" is that it is widely believed that since the United States is a wealthy, developed nation, more affluent residents should enjoy better health indicators than in developing countries among members of lower socioeconomic classes. Poverty in and of itself is considered a health risk factor in epidemiological literature. However, lifestyle changes made by immigrants and their children during the process of acculturation to United States culture and practice in themselves present health risks (Escobar, 1998; Farley, Galves, Dickinson, & Perez, 2005; Finch & Vega, 2003; Lara et al., 2005;Scribner, 1996; Sullivan & Rehm, 2005). For example, negative health outcomes of acculturation include diabetes, obesity, heart disease, poor birth outcomes, and mental health issues. Vega, Kolody, et al. (1998) compared lifetime prevalence by psychiatric disorder and place of birth among urban and rural Mexican Americans in California. They found that recent Hispanic immigrants are half as likely to have suffered from a mental disorder as U.S.-born Hispanics. In sum, based on increased health risk factors for immigrants living in the United States and the likelihood of a decline in healthy behaviors over time among foreign-born Hispanics and subsequent generations (Abraído-Lanza, Chao, & Flórez, 2005), the "Hispanic health paradox" hardly seems like a paradox but rather a commentary on the health risks of U.S. culture.

Some of the risk factors in Hispanic mental health are related to individual circumstances of immigration, such as stress (Kim-Godwin & Bechtel, 2004), document status, and weakened social support (in cases of males emigrating without their families), and are less germane to border research. Poverty-related risks include lack of insurance, which is associated with lower rates of service utilization (Sullivan & Rehm, 2005); lack of services, particularly in rural areas; and structural barriers to care, such as lack of access to services, including issues like lack of transportation to a distant treatment center (Anderson & Gittler, 2005). Impoverished Hispanics living in rural areas are at greater risk for depression (Schmaling & Hernandez, 2005).

Low socioeconomic status (SES), especially the inability to meet basic needs, is a high risk factor for psychiatric problems (Hernandez, Plant, Sachs-Ericsson, & Joiner, 2004). Notwithstanding the increased risk that accompanies low socioeconomic levels, rates of psychiatric morbidity are significantly lower among Hispanic immigrants (Vega, Kolody, et al., 1998 ; Vega & Lopez, 2001) who tend to belong to lower SES. The risk factor of poverty is mitigated among Hispanics by a higher quality of social support and better interpersonal relations. These "protective factors" among Hispanics (Alderete, Vega, Kolody, & Aguilar-Gaxiola, 2000), particularly sociocultural behaviors such as social networking and strong family relationships, mitigate against the development of many

mental health problems. Social and emotional support systems diminish the need for services (Finch and Vega, 2003; Hernandez et al., 2004; Vega, Kolody, et al., 1998).

In some important studies on Hispanic mental health, place of birth has been shown to be of more relevance to risk than SES or ethnicity (Escobar, 1998; Vega, Kolody, et al., 1998). American-born Hispanics are twice as likely as foreign-born Hispanics for substance abuse, mood, and anxiety disorders as outlined in the Diagnostic and Statistical Manual of Mental Disorders (4th ed.; Grant et al., 2004; Sullivan & Rehm, 2005). Certain origination points, notably Central America, where immigrants are likely to have experienced trauma from political violence, should be weighted in a risk analysis, as these immigrants are at greater risk for specific psychiatric disorders, such as posttraumatic stress disorder (Eisenman, Gelbert, Liu, & Shapiro, 2003).

Other risks are related to cultural factors, such as the process of acculturation, which has been shown to be unprotective (Farley et al., 2005; Russell, Williams, Farr, Schwab, & Platttsmier, 1999). Along with discrimination, the acculturation process is correlative to a decline in health outcomes (Escobar, 1998; Finch & Vega, 2003; Sullivan & Rehm, 2005). Acculturation is associated with a variety of negative health-related behaviors, including smoking, drugs, drinking, poor dietary habits and nutrition, and birth outcomes, such as low birth weight, teen pregnancy, prematurity, and neonatal mortality (Lara et al., 2005).

Many Hispanics experience psychiatric disorders as somatic symptoms and prefer to seek care from primary care providers who may not recognize clinically significant depressive symptoms (Tarshis, Jutte, & Huffman, 2006) and are reluctant to record diagnoses of depression given that Hispanics are resistant to pharmaceutical therapies for mental health issues (Schmaling & Hernandez, 2005). Hispanic immigrants are much more likely to seek care if they are suffering from comorbid disorders (Vega, Kolody, & Aguilar-Gaxiola, 2001; Vega, Kolody, et al., 1998).

Previous research suggests that rates of lifetime prevalence and 12-month prevalence of mental health issues differ significantly. Hernandez et al. (2004) examined 1-year prevalence rates and found that Hispanics were more likely than Whites to have met criteria for a psychiatric diagnosis within the past year, had higher 1-year prevalence rates for anxiety disorders, had greater problems meeting their basic needs, and had better interpersonal relations. However, Breslau et al. (2005) found that Hispanics had a lower lifetime prevalence of any mental disorder than non-Hispanic Whites based on data from the NCS among English-speaking households. Many studies, including our own, use clinical data that are derived from service utilization (see Caetano, Mora, Schaefer, & Marino, 1999; Schmaling & Hernandez, 2005; Wang et al., 2005). Since Hispanics are less likely to use mental health services, whether from lack of accessible treatment centers or services or culturally defined perceptions of mental health problems, data from service utilization are more likely to reflect underreporting of mental health issues than a survey that includes a diagnostic interview such as the CIDI.

Furthermore, undocumented Hispanics are not only underserved but also understudied (Chavez, Flores, & Lopez-Garza, 1992; Santiago-Irizarry, 1996). Because of human subjects

restrictions that stipulate that study participants may not be placed in jeopardy, gathering epidemiological data on the undocumented is challenging. The Pew Hispanic Center (2007) reports that as of 2005, approximately 5.9 million undocumented Hispanics live in the United States, a significant cohort whose mental health needs have been neither assessed nor addressed. Designating Hispanics "at risk" mobilizes public funds. However, the "political redistribution of resources" does not include the undocumented, a particularly at-risk population (Santiago-Irizarry, 1996; Sullivan & Rehm, 2005).

The Hispanic population is extremely diverse, with rates of mental disorders correlated both to ethnicity and to levels of acculturation, particularly in relation to the weakening of social and family support. Some groups assimilate with greater facility than others or emigrate with better education and financial opportunities, reducing the risk for mental illness. Others arrive as refugees with wartime trauma and are at greater risk for specific illnesses, such as posttraumatic stress disorder (Eisenman et al., 2003).

The border region, on the margins of two nations with increased cultural exchange due to proximity, presents unique features in terms of health indicators. Border populations dwell on the thresholds of nation-states, with considerable movement of people, customs, and ideas between two local worlds. To examine thoroughly the health of border populations, investigators must not only delve into complex issues surrounding mental health but also deal with cross-cultural interpretations of what mental health means in both local worlds. Our data, compared to similar research in nonborder regions, illustrate the uniqueness of the *colonia* communities on the U.S.–Mexico border.

Method

Interviews were conducted with 274 residents of Colonia Felipe Angeles in Ciudad Juarez, Mexico, and 216 residents of Colonia San Elizario, El Paso County, Texas. [1] Participants were randomly selected after several stages of cluster sampling. Residential blocks were mapped and several households randomly selected from each block. In each household, one adult 18 years old or over, selected by most recent birth date, was invited to participate. The response rate in Colonia Felipe Angeles was close to 90%, while that of Colonia San Elizario was 75%.

Interviewers were employed from Border Health Solutions in El Paso, an agency that provides bilingual research assistance to investigators, and from among university students in Juarez. Interviewers were trained to preserve confidentiality. The questionnaire was administered first in San Elizario and adapted for use in Felipe Angeles.

The instrument included demographic questions that included gender, age, marital status, family composition, household income, work status, birthplace, and length of residency. We also included selected questions assessing acculturation, alcohol abuse, health histories, health status, and behavioral risk factors. We measured acculturation using the Short Acculturation Scale for Hispanics (SASH). This survey is comprised of 12 questions that

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[1] For a more thorough discussion of methods, see Anders et al. (in press) and Ibarra, Bernes, Ortiz, and Anders (in press).

assess language use, media preferences, and social relationships. The scores range from 12 to 60, with higher scores indicating higher acculturation levels. Although it might seem apparent that residents of Mexico show low acculturation to U.S. culture, we administered the SASH questionnaire as a basis for comparison between the two communities and also to assess whether living on the border affects acculturation levels. We included the CAGE questionnaire (cutting down, annoyance by criticism, guilty feelings, and eye-openers) to assess alcohol use and abuse (Ewing, 1984). We also included a number of questions from the Behavioral Risk Factor Surveillance System (BRFSS; Centers for Disease Control and Prevention, 2002; see also Olson, Bader, Anders, & Perez, 2007). We included questions on physical and emotional health from the SF36, version 2 (hereafter SF36v2), a 36-item questionnaire assessing physical health, physical and emotional role function, bodily pain, social functioning, mental health, vitality, and general health perceptions (Ware, 2000).

In this paper, we examine more closely the responses related to the following survey question: "Have you ever been told by a health care professional that you suffer from depression?" The responses are cross-tabulated with responses that have been shown in the literature to impact mental health among Hispanic immigrants. These include gender, place of birth, length of residency, and acculturation. Female gender has been repeatedly shown to be correlative with higher rates of depression cross-culturally, and our findings support this correlation. In the literature on Hispanic mental health in nonborder regions, place of birth and length of residency have been found to be protective against mental health issues, while acculturation is positively correlated with the development of mental health problems over time.

Results and Discussion

Table 1 summarizes the demographic and health questionnaire results of our survey for each community that we reference in this paper. In each *colonia,* more women than men participated in the survey, approximately two-thirds women to one-third men. Mean age was comparable, although the U.S. population was slightly older (42.3 years old in San Elizario to 38.7 years old in Felipe Angeles). Residents of San Elizario (El Paso County, Texas) had more years of education (9.6 years in San Elizario compared to 6.8 years in Felipe Angeles). Residents of Felipe Angeles (Ciudad Juarez, Mexico) were twice as likely as residents of San Elizario to have arrived in the community within the past 5 years, although both communities were very stable with the great majority of the population having lived there for more than 10 years. Not surprisingly, Felipe Angeles had a higher percentage of residents born in Mexico, while 66.7% of San Elizario residents were born in Mexico, and 32.9% were U.S. born. Residents of San Elizario were more likely to be married (69.4%), while nearly half of respondents in Felipe Angeles were married. A third (33.5%) of respondents in Felipe Angeles reported "other" when asked for civil status. More than half (53.4%) of respondents in Felipe Angeles worked outside the home, while 50.2% in San Elizario were similarly employed. Residents of San Elizario earned three times that of respondents in Felipe Angeles in U.S. dollars. Nearly a third of residents of San Elizario reported income between $7,000 and $14,000, with more than 27% reporting income of above $21,000, while 18.5% of residents of San Elizario reported incomes below $7,000. By contrast, nearly half of residents of Felipe Angeles reported income below $3,500 with more

than 30% earning between \$3,500 and \$7,000. Although Felipe Angeles is considerably poorer in real income, these two communities are easily comparable in terms of demographic profiles.

Table 2 summarizes the results from provider-diagnosed depression, mean SASH scores, and mean mental health scores from the SF-36v2. In San Elizario, 14.3% of male respondents and 24.2% of females have ever been diagnosed with depression. In Felipe Angeles, a similar percentage (16.7%) of male respondents responded positively, and almost twice as many females did so (31.9%). These results are remarkably similar between the communities, although women in Felipe Angeles were more than 7% more likely to have been diagnosed with depression. Mean SASH scores were 25.4 for San Elizario with 196 participants responding, while residents of Felipe Angeles, unsurprisingly, reported low SASH scores (mean = 15.5). Mean scores for the mental health section of the SF36v2 were quite similar between the two communities: 50.6 in San Elizario and 48.4 in Felipe Angeles.

We discovered that rates of reported mental health issues in these border communities differ from those found in previous studies among Hispanic immigrant communities in the interior of the United States, leading us to conclude that mental health issues unique to the border region remain essentially unaddressed in the literature on Hispanic mental health.

The following discussion of Table 3 compares the incidence of depression within each category of the four variables highlighted in our paper: gender, place of birth, length of residency, and acculturation, here measured by language of thought. Each cell in Table 3 shows the real number of respondents and the percentage those respondents who make up the total number of participants in that category. The sum of *n* from each cell in the four categories totals the number of persons who had ever received a diagnosis of depression (San Elizario = 44; Felipe Angeles = 74). For example, of the men in San Elizario, 12 (14.3% of total male respondents in Table 1) and 32 women (24.2% of total female respondents in Table 1) had ever been diagnosed with depression. The sample size was rather small; for example, one person in San Elizario who had been in the United States less than 1 year had ever been diagnosed with depression but represented 25% of the category along with three who had lived in Felipe Angeles for less than 1 year.

Gender

Rates of depression among women in Felipe Angeles are significantly higher than those among women in San Elizario. In Felipe Angeles, nearly a third (31.9%) of the female respondents reported ever having been told by a health care provider that they had depression, compared to 24.2% of the female respondents in San Elizario. Women in Felipe Angeles had received diagnoses of depression at nearly twice the rate as men. Among the men, 16.7% in Felipe Angeles and 14.3% in San Elizario had received diagnoses of depression.

Place of Birth

Nearly all the respondents in Felipe Angeles were born in Mexico, compared to two-thirds of San Elizario residents. Mexican-born residents of Felipe Angeles reported being diagnosed with depression at a rate of nearly 30%. However, the U.S.-born population in

Felipe Angeles is not sufficiently significant in our sample to serve as a comparison. In San Elizario, however, birthplace appeared to have little correlation to rates of diagnosed depression, contrary to what has been found in other studies: approximately 20% each of both U.S.-born and Mexican-born respondents reported having been diagnosed with depression.

Length of Residency

We found that among residents of Felipe Angeles who had lived in the city less than one year ($n = 3$), all reported having been diagnosed with depression, representing 25% of the sample. These respondents were likely to have emigrated from other parts of Mexico, although little is known about the experience of internal migration. After 1 to 5 years of residence, respondents began to report physician-diagnosed depression at increasing rates, with 29.9% of those who had lived in Felipe Angeles for more than 10 years reporting ever having been diagnosed with depression. In San Elizario, 25% of recent immigrants ($n = 1$ of a total of 4) reported having been diagnosed with depression. With increasing length of residency, higher rates of diagnoses of depression were reported, similar to the trend in Felipe Angeles. More than 20% of residents of San Elizario who had lived there for more than 10 years reported ever having been diagnosed with depression. These percentages are considerably higher than the 8% lifetime prevalence of affective disorders reported by Vega, Kolody, et al. (1998) among recent immigrants to Fresno County, California, and merit further research.

Acculturation

The question of acculturation is the most problematic in our study. The SASH questionnaire measures acculturation to U.S. culture and is not applicable to Mexican communities. At the border, however, administering the SASH survey was not without usefulness since we can learn to what extent border communities participate in or embrace the culture of northern neighbors; and, in fact, residents of Felipe Angeles reported low but not nonexistent levels of acculturation (Table 2).

The literature on Hispanic communities inside the United States indicates that higher acculturation levels are associated with a decline in health outcomes, including mental health (Escobar, 1998; Farley et al., 2005; Finch & Vega, 2003; Sullivan & Rehm, 2005). Interestingly, the lowest SASH scores from our survey in both *colonias* are correlated with the highest frequency of depression diagnosed by a health professional (see discussion later). However, the relationship between low acculturation and depression in Felipe Angeles is less remarkable because low acculturation to U.S. culture is expected in a Mexican community. For the purposes of our comparison with nonborder regions, it is our data on San Elizario that are interesting in terms of the relationship between low SASH scores and affective disorders. Our findings with regard to mental health in San Elizario digressed from those of demographically similar populations living in nonborder regions.

To assess acculturation, we examine both mean SASH scores (Table 2) and the language in which the respondent thinks (Table 3). Mean SASH scores for both Felipe Angeles and San Elizario indicated similarly low levels of acculturation. Scores for SASH run from 12 to 60,

12 indicating low acculturation and 60 indicating high acculturation. The mean for Felipe Angeles was 15.5 and for San Elizario 25.4. In Felipe Angeles, 44.6% of positive responses to the question "Have you ever been told by a healthcare provider that you suffer from depression?" were reported by respondents with the lowest SASH score of 12. Similarly, nearly 50% of the positive responses to the question about depression among San Elizario participants were concentrated in the lowest SASH scores (12 through 16). Therefore, in the border area, low acculturation is not protective against affective disorders as has been shown in other Hispanic communities inside the United States.

We analyzed responses to a single question from the SASH scale: "In what language do you usually think?" Responses included only Spanish, more Spanish than English, both equally, more English than Spanish, and only English. In this case, our data on San Elizario support the literature on the correlation between high acculturation and higher rates of depression (Table 3). Nearly twice as many only-English speakers (38.5%) reported having been diagnosed with depression than respondents who speak only Spanish (20.7%). Since the extent to which accessibility of care and service utilization inform our data and the ways in which Spanish-only speakers report affliction to their health care providers are unclear, future research directions will address these issues.

Conclusion

Our data appear to conflict with the findings in the literature among Hispanic immigrants to the United States in several ways. First, birthplace does not appear to have the same correlation to mental health as has been found in nonborder regions. Rates of depression for Mexican-born residents of both *colonias* are significantly higher than reported among California Hispanics by Vega, Kolody, et al. (1998) as well as among residents of Mexico City (Breslau et al., 2007; Vega, Kolody, et al., 1998). Second, place of birth appeared to make no difference in rates of depression among U.S.-born and Mexican-born residents of San Elizario. Second, the data on acculturation collected in San Elizario and Felipe Angeles and represented by low SASH scores show that low acculturation is not protective in the border area, while low acculturation has been shown to be protective in the interior of the United States, such as in Fresno County, California. On the other hand, when analyzing the correlation between acculturation represented by language of thought and mental health issues, English-only (high acculturation *or* U.S. nativity) respondents reported rates of diagnoses of depression that were twice as high as Spanish-only respondents, concurring with the results of Vega, Kolody, et al. (1998). Third, length of residency of less than 1 year in both San Elizario and Felipe Angeles is correlated with high rates of diagnoses of depression, although our sample size is too small to be statistically significant. Further research with a larger sample is necessary to examine whether these results are indicative of the larger population. However, both *colonias* exhibit an upward trend in rates of depression the longer respondents reside in border communities.

Because much of our data conflict with the findings of other studies on Hispanic immigrants residing in the United States, we believe that our research shows that the border area has unique sets of mental health issues that remain largely unexplored and that our study can provide the basis on which to develop future research in border health. The flattened

statistics on rates of diagnosed depression across the border indicate that the border region clearly has different mental health risk factors than the interior of Mexico or the United States. These risk factors unique to the border region warrant further investigation.

Acknowledgments

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TABLE 1

Summary of Demographic Questionnaire Items

Item	San Elizario			Felipe Angeles		
	Total	**Male**	**Female**	**Total**	**Male**	**Female**
Gender	216	84	132	274	85	189
Age (mean)	42.3	43.3	41.6	38.7	41.3	37.5
Relationship status				($n = 266$)	($n = 84$)	($n = 182$)
Married	150 (69.4%)	64 (76.2%)	86 (65.2%)	130 (48.9%)	43 (51.2%)	87 (47.8%)
Common law	9 (4.2%)	3 (3.6%)	6 (4.5%)			
Divorced	14 (6.5%)	5 (6%)	9 (6.8%)	9 (3.4%)	3 (3.6%)	6 (3.3%)
Separated	6 (2.8%)		6 (4.5%)			
Widowed	8 (3.7%)		8 (6.1%)			
Single	29 (13.4%)	12 (14.3%)	17 (12.9%)	38 (14.3%)	16 (19%)	22 (12.1%)
Other				89 (33.5%)	22 (26.2%)	67 (36.8%)
Highest grade	9.6 years	9.4 years	9.7 years	6.8 years	7.0 years	6.6 years
(mean)	($n = 215$)	($n = 83$)		($n = 267$)	($n = 82$)	($n = 185$)
Length of residency						
<1 year	4 (1.9%)	1 (1.2%)	3 (2.3%)	3 (1.1%)	2 (2.4%)	1 (0.5%)
1–5 years	7 (3.2%)	1 (1.2%)	6 (4.5%)	17 (6.2%)	6 (7.1%)	11 (5.8%)
6–10 years	11 (5.1%)	3 (3.6%)	8 (6.1%)	19 (6.9%)	7 (8.2%)	12 (6.3%)
>10 years	194 (89.8%)	79 (94%)	115 (87.1%)	235 (85.8%)	70 (82.4%)	165 (87.3%)
Place of birth						
Mexico	144 (66.7%)	52 (62%)	92 (69.7%)	269 (98.5%)	82 (96.5%)	187 (99.5%)
United States	71 (32.9%)	32 (38.1%)	39 (29.6%)	4 (1.5%)	3 (3.5%)	1 (0.5%)
Other	1 (0.5%)		1 (0.8%)			
Household income	$17,575	$19,088	$16,511	$5,538	$6,532	$5,044
(mean)	($n = 157$)	($n = 67$)	($n = 90$)	($n = 217$)	($n = 72$)	($n = 145$)

TABLE 2

Summary of Health Questionnaire Items

Item	San Elizario			Felipe Angeles		
	Total	**Male**	**Female**	**Total**	**Male**	**Female**
Have you ever been told by a health care provider that you have depression?	44 (20.4%)	12 (14.3%)	32 (24.2%)	74 (27.2%) ($n = 272$)	14 (16.7%) ($n = 84$)	60 (31.9%) ($n = 188$)
SASH score (mean) 60 = highest, 12 = lowest acculturation	25.4 ($n = 196$)	25.6 ($n = 78$)	22.5 ($n = 118$)	15.5	15.8	15.3
SF-36v2 Mental health (mean)	50.6 ($n = 106$)	53.1 ($n = 82$)	48.9 ($n = 124$)	48.4 ($n = 257$)	47.8 ($n = 82$)	48.7 ($n = 175$)

TABLE 3

Results Summary: Lifetime Diagnosis of Depression by Gender, Place of Birth, Length of Residency, and Language of Thought

Ever Told Have Depression:	Gender		Place of Birth		Length of Residency				Language of Thought				
	Male	Female	United States	Mexico	<1 year	1–5 years	6–10 years	>10 years	Only Spanish	More Spanish Than English	Both Equally	More English Than Spanish	Only English
San Elizario (*n* = 216)	14.3% (*n* = 12)	24.2% (*n* = 32)	19.7% (*n* = 14)	20.7% (*n* = 30)	25% (*n* = 1)	0	18.2% (*n* = 2)	21.1% (*n* = 40)	20.7% (*n* = 29)	6.2% (*n* = 1)	23.3% (*n* = 7)	11.8% (*n* = 2)	38.5% (*n* = 5)
Felipe Angeles (*n* = 272)	16.7% (*n* = 14)	31.9% (*n* = 60)	0	27.3% (*n* = 73)	25% (*n* = 3)	11.1% (*n* = 3)	24.1% (*n* = 7)	29.9% (*n* = 60)	27.5% (*n* = 73)	25% (*n* = 1)	0	0	0