

Published in final edited form as:

Arch Suicide Res. 2023; 27(2): 629-643. doi:10.1080/13811118.2022.2029784.

# Neighborhood Belonging and Thoughts of Death Among Hispanics in the United States

Caroline Silva,

Nora Douglas,

**Kimberly Van Orden** 

Department of Psychiatry, University of Rochester School of Medicine and Dentistry, Rochester, New York, USA.

#### **Abstract**

**Objective:** Suicide rates among Hispanics in the United States have steadily risen over the last 2 decades, especially among youth and adults in midlife. Social disconnection (low belonging) is associated with suicidal ideation; however, little is known about the demographic and social factors that impact a sense of belonging among Hispanic adults in midlife. The current study sought to examine (a) the association between demographic and social factors (acculturative stress, community integration and engagement, religiosity, ethnic cohesion) and neighborhood belonging as well as (b) whether neighborhood belonging is associated with passive suicide ideation (thoughts of death) among a community sample of Hispanic adults.

**Method:** This study uses a sample of 968 Hispanic adults in midlife, from Puerto Rican, Mexican, and Dominican backgrounds, from the Midlife in the United Sates (MIDUS): Survey of Minority Groups.

**Results:** Overall, community integration, religiosity, and community engagement were unique positive predictors of neighborhood belonging; lifetime number of discrete events of discrimination was the only unique negative predictor. Among foreign-born respondents, community integration, community engagement, and discrimination were associated with neighborhood belonging, whereas, among U.S.-born respondents, only religiosity and community were associated with belonging. Neighborhood belonging was the only variable negatively associated with thoughts of death among depressed participants.

**Conclusion:** Fostering a sense of neighborhood belonging among Hispanic adults—particularly via promoting community engagement—may help decrease suicide risk.

Kev	/WO	rds
-----	-----	-----

Hispanics;	Latinos; neighborhood belonging; suicide ideation	
_		_

Correspondence concerning this article should be addressed to Dr. Caroline Silva, Department of Psychiatry, University of Rochester School of Medicine and Dentistry, 300 Crittenden Blvd., Box PSYCH, Rochester, NY 14642-0001, USA. caroline\_silva@urmc.rochester.edu.

DISCLOSURE STATEMENT

No potential conflict of interest was reported by the author(s).

## INTRODUCTION

Historically, compared to other ethnic or racial groups, Hispanics have been at decreased risk for suicide ideation, attempts, and death in the United States (CDC, 2020). However, suicide rates among U.S. Hispanics have risen rapidly in the last 2 decades, particularly among women. From 1999 to 2019, suicide rates among Hispanic women increased by approximately 59% overall while increasing nearly 100% among adolescents/young adults and 75% among those in midlife (CDC, 2020). Even though Hispanics are the largest ethnic or racial minority group in the United States (Ennis, Rio-Vargas, & Albert, 2011), there remains a dearth of research examining the cultural and social factors associated with suicide risk that could account for these changes among this population, especially adults.

Hispanic ethnic/cultural identity is closely tied with cultural values (i.e., *familismo*, *espiritismo*) that may reduce risk for suicide despite the elevated presence of mental health problems and socioeconomic stressors among Hispanics (Fortuna et al., 2016; Mascayano et al., 2015). *Familismo* (familism) refers to a social structure that prioritizes the needs of the family above that of individual family members. Aspects of familism (i.e., familial connectedness) have been associated with decreased suicidality and fewer suicide attempts among Hispanics (Borowsky, Ireland, & Resnick, 2001; Locke & Newcomb, 2005; Maimon, Browning, & Brooks-Gunn, 2010; Oquendo et al., 2005; Ungemack & Guarnaccia, 1998). *Espiritismo* (spirituality/religiosity) refers to the cultural belief that spirits affect physical and mental well-being and the importance of spiritual leaders or the Church in healing and guiding behaviors. Greater religious adherence has also been associated with lower suicide rates among Hispanics, with some indication that U.S.-born Hispanics benefit from adherence to any religion, whereas foreign-born Hispanics benefit most from Catholic adherence (Barranco, 2016; Barranco & Harris, 2021).

Conversely, acculturative stress (i.e., stress experienced by minority group members in adapting to the majority group's culture) has been associated with suicide ideation (Hovey, 2000), attempts (Vega, Gil, Zimmerman, & Warheit, 1993), and deaths (Wadsworth & Kubrin, 2007) among Hispanics. Acculturative stress is thought to increase suicide risk via the disintegration of ethnically and culturally based social roles, networks, and relationships (e.g., loss of family structure and supports) (Ungemack & Guarnaccia, 1998). Indeed, aspects of acculturative stress, including greater discrimination exposure, lower ethnic identity, greater family conflict, and a low sense of belonging have been associated with suicide ideation among Hispanic immigrants (Fortuna et al., 2016). Similarly, younger age at migration, longer time in the United States, higher degree of English-language orientation, lower Hispanic social network, lower Hispanic ethnic identity, and perceived discrimination were associated with increased lifetime risk of suicide ideation and attempts in a large nationally representative sample (Perez-Rodriguez et al., 2014). Discrimination and social acculturative stress (i.e., quality of social relationships) have been associated with over three times increased odds of suicide attempts among Hispanic emerging adults (Gomez, Miranda, & Polanco, 2011).

The interpersonal theory of suicide (Joiner, 2005) posits that two aspects of social disconnection—low belonging and perceived burdens on others—lead to the development

of suicide ideation when perceived to be stable and unchanging (Van Orden et al., 2010). Research directly examining the propositions of the interpersonal theory has found that low belonging and perceived burdensomeness are significantly positively associated with suicide ideation severity among Hispanic/Latino college students (Acosta, Hagan, & Joiner, 2017) and Spanish-speaking Hispanic/Latino adults in the United States (Silva et al., 2018). Notably, perceived burdensomeness has also been found to mediate the relation between low ethnic identity and increased suicide risk in the presence of low belongingness among Hispanic/Latinx young adults (Oakey-Frost, Tucker, & Buckner, 2021). Among Spanish-speaking Mexican/Mexican American adult women receiving outpatient services at an urban community health center, perceived burdensomeness but not familism significantly predicted suicidal ideation (Garza & Pettit, 2010).

Belonging, in particular, is thought to be a dynamic state that might serve as a malleable target for suicide prevention (Joiner, Van Orden, Witte, & Rudd, 2009). The importance of social connectedness (e.g., belonging, loneliness, social integration) to physical and mental well-being is well documented globally (Hawkley & Cacioppo, 2010). Poor social connectedness is associated with increased morbidity, premature mortality, cognitive decline, and mental health problems (Haslam, Cruwys, Haslam, & Jetten, 2015). The association of belonging with wellness among Hispanics is apparent in a variety of forms. For example, social cohesion has been found to mediate the association between neighborhood poverty and poor mental health among a national sample of Latino adults (Hong, Zhang, & Walton, 2014). Among Latino adolescents, greater school and neighborhood belonging is associated with more positive academic outcomes (Sánchez, Colón, & Esparza, 2005) and better psychological functioning (decreased depression) (Maurizi, Ceballo, Epstein-Ngo, & Cortina, 2013).

Cultural and social factors that impact belonging among Latino adolescents include English-language proficiency, adult evaluation, familism, and peer self-concept (Cupito, Stein, & Gonzalez, 2015; Morrison, Cosden, O'Farrell, & Campos, 2003). Among Latino college students, campus life integration (e.g., membership in religious and social-community organizations), campus community engagement, and interactions with diverse peers are associated with a greater sense of belonging (Hurtado & Carter, 1997; Lamont Strayhorn, 2008; Nuñez, 2009). In contrast, higher levels of acculturation (Baldwin-White, Kiehne, Umaña-Taylor, & Marsiglia, 2017; Nuñez, 2009) and perceived discrimination (Baldwin-White et al., 2017; Hurtado & Carter, 1997) are associated with lower levels of belonging among Latino youth.

Although prior research has shown evidence for the relationship among acculturative stress, community integration and engagement, well-being, and belonging (i.e., school/community) among youth, research on the cultural and social factors that might impact Hispanic/Latino adults' sense of belonging in midlife is lacking. Thus, the current study examines factors associated with a form of belonging especially relevant to those in midlife: neighborhood belonging (i.e., sense of community, trust, and reciprocity among members living in an area) as well as whether neighborhood belonging is associated with passive suicide ideation among a community sample of Hispanic adults in the Midlife in the United Sates (MIDUS): Survey of Minority Groups (Hughes & Shweder, 2018).

Despite having one of the largest national samples of Hispanics, data from the MIDUS: Survey of Minority Groups have not been widely examined. The International Consortium for Political and Social Research (ICPSR), which maintains the data archive, reports only 18 data-related publications to date (8 journal articles, 6 book chapters, 3 dissertations, and 1 conference presentation) (ICPSR, 2018). Of these publications, none have examined neighborhood belonging or thoughts of death.

The main aims of the current study were thus to examine (1) the demographic and social factors associated with neighborhood belonging, and whether these varied based on birth origin (foreign- vs. U.S.-born), and (2) the relationship between neighborhood belonging and thoughts of death (a type of passive suicide ideation) among Hispanic adults. Based on the interpersonal theory of suicide, we hypothesize that lower levels of discrimination (i.e., an indicator of acculturative stress), greater community engagement, religiosity, and a stronger ethnic identity are associated with an increased sense of belonging to one's neighborhood. We expect that a lower sense of neighborhood belonging is associated with the presence of one form of suicidal thinking, thoughts of death.

## **METHOD**

## Sample

This study utilized data from the MIDUS: Survey of Minority Groups (Hughes & Shweder, 2018). The MIDUS Survey of Minority Groups was part of the larger Midlife in the United States (MIDUS) project, which sought to examine midlife development relating to physical health, psychological well-being, and social responsibility. The Survey of Minority Groups assessed the well-being of middle-aged, urban, ethnic minority adults in New York and Chicago using stratified random sampling (with fixed quotas for ethnicity, gender, age, and labor force status) between 1995 and 1996. Census block groups were utilized as the primary sampling unit, selected on higher/lower median income and high/low ethnic density. Eligible participants were identified via door-to-door screening by trained interviewers. Structured interviews were conducted face-to-face in English or Spanish (Hughes, 2001). The full sample (N=1306) includes African Americans, Dominicans, and Puerto Ricans in New York City (NYC) and Mexicans and Puerto Ricans in Chicago. Given our interests in examining neighborhood belonging and thoughts of death among Hispanics, the analytic sample was limited to all the Hispanic (i.e., Dominican, Puerto Rican, and Mexican) respondents (n = 968) in the sample. Although 2 decades old, the MIDUS Survey of Minority Groups remains one of the largest national samples of Hispanics in the United States to date.

In the current study, participants were 968 Hispanics adults of Puerto Rican (46.6%), Dominican (29.3%), and Mexican (24.1%) backgrounds. Most were not born in the United States, identified Spanish as their native language, and were first generation. Approximately half were married. See Table 1 for sample characteristics. Average age was 42.15 years (SD = 13.10 years; range 21–99 years). However, foreign-born respondents were significantly older (M = 43.47, SD = 12.92) than U.S.-born respondents (M = 38.53, SD = 12.93), t(966) = 5.28, p < .001. As expected, based on the stratified random sampling, 50.2% of the sample was female and 49.8% was male.

#### **Puerto Ricans**

Puerto Ricans living in NYC (n=284) were significantly older (M=45.23 years, SD=14.52 vs. M=41.30 years, SD=12.88, p<.01) and reported living longer in their neighborhoods (M=14.65 years, SD=11.20 vs. M=7.34 years, SD=7.88, p<.001), greater community engagement (M=4.12, SD=1.87 vs. M=3.24, SD=1.84, p<.001), and greater ethnic cohesion (M=3.62, SD=.52 vs. M=3.41, SD=.68, p<.001) than those in Chicago (n=167). Accordingly, Puerto Ricans in Chicago were more likely to be foreign-born (n=167) than those in New York (n=167), n=16, n=16, n=16. Importantly, however, Puerto Ricans in NYC and Chicago did not differ on other variables of interest, including neighborhood belonging (NYC n=16), n=160. So vs. Chicago n=161, and were therefore collapsed into one group for analyses.

Of note, Dominicans (89.8%) and Mexicans (90.1%) were more likely to report being foreign-born than Puerto Ricans (54.1%),  $\chi^2(2) = 157.89$ , p < .001. Accordingly, Dominicans (89.8%) and Mexicans (90.1%) were significantly more likely to be first generation than Puerto Ricans (54.1%),  $\chi^2(4) = 2.47$ , p < .001.

#### **Measures**

**Demographics**—Demographic variables of interest included age, gender (male/female), Hispanic group (Puerto Rican, Dominican, Mexican), birth origin (U.S.- vs. foreign-born), and native language.

**Acculturative Stress**—Acculturative stress was assessed using multiple indicators, including English-language proficiency, immigrant generation, and discrimination. Language proficiency was assessed via the item: "When you are thinking to yourself, what language do you usually think in?," which was rated on a 5-point Likert scale (1 = Spanish only to 5 = only English) with higher scores indicating greater English-language proficiency. Immigrant generation was assessed as first, second, or third. First-generation status refers to those who are foreign-born. Second-generation status refers to those with at least one foreign-born parent. Third-generation includes those with two U.S.-native parents.

Discrimination was assessed in two ways: (a) frequency of daily discrimination and (b) count of lifetime discrete events. Frequency of daily discrimination was assessed using 9 items asking how frequently respondents were treated with less courtesy; were treated with less respect; received poorer service than other people; experienced people acting as if they were not smart, as if they were afraid of them, as if they were dishonest, or as if they were not good; were called names or insulted; and were threatened or harassed. Items were rated on a 5-point Likert scale (1 = never to 5 = very often) and averaged such that higher scores indicated more frequent daily discrimination (a = .90). Discrete discrimination events included: teacher/adviser discouraged higher education; prevented from renting or buying a home; wanted to move out due to neighbors; and been hassled by the police, denied a bank loan, and victim of social discrimination. Respondents indicated yes or no as to whether

<sup>&</sup>lt;sup>1</sup>Language proficiency, generational status, and discrimination frequency were chosen as indicators as these are prominent factors that contribute to stress experienced in adapting to a new culture (i.e., acculturative stress). Accordingly, scales of acculturative stress capture these dimensions (Mena et al., 1987; Rodriguez et al., 2002).

these events had ever happened to them. Responses were summed (count range 0–6) such that higher numbers indicated more lifetime discrete discrimination events.

Community Integration and Engagement—Community integration was assessed via the item: "How many years have you lived in your current neighborhood?" More years lived in neighborhood indicated greater community integration. Community engagement was assessed via the item: "How often do you have a real conversation or get together socially with any of your neighbors? Again, would you say almost every day, several times a week, about once a week, 1–3 times a month, less than once a month, or hardly ever?" The item was rated on a 6-point Likert scale (1 = almost every day to 6 = never or hardly ever). Item responses were reverse-scored such that higher scores indicated greater community engagement.

**Religiosity**—Religiosity was assessed using 3 items rated on a 4-point Likert scale (1 = very to 4 = not at all). Items included "How religious are you?," "How superstitious are you?," and "How important is it for parents to send their children for religious or spiritual services or instruction?" Item responses were reverse-scored and averaged, such that higher scores indicate greater religiosity ( $\alpha$  = .68).

**Ethnic Cohesion**—Ethnic cohesion was assessed using 2 items rated on a 4-point Likert scale. Items included "How closely do you identify with being [racial or ethnic group]? Would you say very closely, somewhat closely, not very closely, or not closely at all?," "How much do you prefer to be with other people who are [racial or ethnic group]? A lot, some, little, or not at all?" Item responses were reverse-scored and averaged, such that higher scores indicate greater ethnic cohesion ( $\alpha = .71$ ).

**Neighborhood Belonging**—Neighborhood belonging was assessed using 4 items rated on a 4-point Likert scale (1 = a lot to 4 = not at all). Items included "I feel I belong to this neighborhood," "I feel loyal to the people in my neighborhood," "A feeling of fellowship runs deep between me and my neighbors," and "Living in this neighborhood gives me a sense of community." Item responses were reverse-scored and averaged, such that higher scores indicate a greater sense of neighborhood belonging ( $\alpha = .93$ ).

Depression and Thoughts of Death—Past-year major depressive episode (MDE) was assessed using the following yes/no screening question: "During the past 12 months, was there ever a time when you felt sad, blue, or depressed for 2 weeks or more in a row?" This screening question is standard procedure for assessing depression in large population-based cohort studies, as the first 2 items are needed for a diagnosis of depression. For respondents who answered yes, the remaining criteria for an MDE was assessed at the worst time point, including presence of thoughts of death (i.e., "Did you think a lot about death—either your own, someone else's, or death in general—during those 2 weeks?"). Although this item could be indicative of recent bereavement and thinking about a loved one's death, previous research has found that respondents who endorse this item in large population-based cohort studies are also more likely to endorse wanting to die (Dong, Kalesnikava, Gonzalez, & Mezuk, 2019).

#### **Data Analytic Plan**

First, we examined differences in neighborhood belonging across gender (male, female), native language (English, Spanish), and birth origin (U.S.-born vs. foreign-born) using t tests as well as Hispanic group (Dominican, Puerto Rican, and Mexican) using analysis of variance. Second, we conducted a multivariate regression with ethnic cohesion, community integration, language proficiency, religiosity, community engagement, and discrimination (daily frequency and discrete events) entered as independent variables and neighborhood belonging as the dependent variable, controlling for age and generational status. We also examined this regression separately among foreign-born and U.S.-born participants. Finally, among participants who endorsed symptoms of depression, we examined the association between neighborhood belonging and thoughts of death.

#### **RESULTS**

See Table 2 for descriptive statistics and intercorrelations for variables of interest.

## **Neighborhood Belonging**

Gender and native language were not associated with a sense of neighborhood belonging. Foreign-born participants reported greater neighborhood belonging (M = 13.44, SD = 3.18) than those who were U.S.-born (M = 12.51, SD = 3.77), t(400.04) = -3.84, p<.001. Neighborhood belonging also significantly differed by Hispanic group, F(2) = 7.06, p<.001. Tukey post-hoc tests indicated that Dominicans (M = 13.74, SD = 3.12) reported significantly greater neighborhood belonging than Puerto Ricans (M = 13.13, SD = 3.54, p<.045) and Mexicans (M = 12.64, SD = 3.24, p<.001), although Puerto Ricans and Mexicans did not differ from each other. Of note, neighborhood Latino concentration (low- vs. high-density tract) was not associated with neighborhood belonging and thus was not included in the model. Participants living in high-density tracts, however, had lived more years in that neighborhood (p<.001), were less religious (p<.01), and reported experiencing less discrimination (frequency p<.01; count p<.01).

We conducted a multivariate regression to examine variables associated with neighborhood belonging, controlling for age and generational status (first-generation/foreign-born, second-generation, or third-generation). The model was significant and accounted for 29% of the variance in neighborhood belonging, R(9, 920) = 41.89, p < .001,  $R^2 = .29.^2$  Community integration, religiosity, and community engagement were unique positive predictors of neighborhood belonging; discrimination (as measured by discrete events not daily frequency) was the only unique negative predictor of neighborhood belonging (see Table 3).

**Birth Origin**—Given differences between foreign-born and U.S.-born respondents on neighborhood belonging, we examined predictors of neighborhood belonging in these two groups separately as well using multivariate regression. Among foreign-born respondents, controlling for age,<sup>3</sup> community integration and community engagement were positively

 $<sup>^2</sup>$ Tests of the assumption of collinearity indicated that multicollinearity was not a concern (all tolerance > .1 and variance inflation factor < 10). The data also met the assumption of independent errors (Durbin-Watson value = 1.80).

associated with neighborhood belonging, while discrimination (discrete events) was negatively associated with belonging. Among U.S.-born respondents, controlling for age and generational status, religiosity and community engagement were the only variables associated with neighborhood belonging (see Table 4).

## **Neighborhood Belonging and Thoughts of Death**

Nearly a quarter of respondents (22.9%) reported feeling depressed for 2 weeks or more. Of those, 42.8% (n = 95) reported frequent thoughts of death. Although there were no differences in endorsing depression across Hispanic groups, among those who reported feeling depressed, Mexicans (27.1%) were significantly less likely to endorse thoughts about death than Puerto Ricans (50.5%) and Dominicans (49.1%),  $\chi^2$  (2) = 7.91, p = .02. Notably, neighborhood belonging did not vary across Hispanic group among this subsample.

To examine whether neighborhood belonging was a worthwhile predictor of thoughts of death, over and above all the other demographic factors, we conducted a two-block logistic regression. Neighborhood belonging was entered as a predictor in the first block and all other predictors were entered in the second. Results showed that neighborhood belonging was a significant predictor of thoughts about death and represented a significant improvement over the null model,  $\chi^2(1, n=198)=8.016, p<.005$ . However, as predicted, adding all other predictors to the model (block 2) did not result in any incremental improvement in the model compared to the block with neighborhood belonging alone,  $\chi^2(9, n=198)=8.95, p=.44$  (see Table 5).

#### DISCUSSION

The aim of the current study was to explore the demographic and social factors associated with neighborhood belonging among a community sample of Hispanic adults and further examine the relationship between neighborhood belonging and thoughts of death. Overall, a sense of belonging increased with age. Foreign-born respondents reported a greater sense of neighborhood belonging than U.S.-born respondents. Dominican respondents also reported greater neighborhood belonging than Puerto Rican and Mexican respondents. Interestingly, however, belonging was not associated with neighborhood concentration of Latinos. It is important to note, however, that Dominicans were (a) more likely to be foreign-born than Puerto Ricans and (b) sampled from a different city (NYC) than Mexican respondents (Chicago), which might account for some of these differences.

In regard to cultural and social factors associated with neighborhood belonging, greater acculturative stress (as measured by discrete discrimination events, not daily frequency) was associated with a lower sense of belonging. As hypothesized, greater community engagement, community integration, and religiosity were associated with greater neighborhood belonging. Contrary to expectations, however, ethnic cohesion was not associated with a sense of neighborhood belonging. Importantly, when examining foreignborn and U.S.-born respondents separately, acculturative stress and community integration was only associated with belonging among foreign-born respondents, whereas religiosity

<sup>&</sup>lt;sup>3</sup>Generational status was not entered as a covariate in this model because all foreign-born respondents are only first-generation

was only associated with belonging among U.S.-born respondents. These results indicate that factors that may impact a sense of neighborhood belonging can vary across Hispanic generations in the United States. However, community engagement seems to be associated with belonging regardless of generational status or neighborhood ethnic concentration. Finally, among Hispanic respondents who reported feeling depressed, a lower sense of neighborhood belonging was associated with the presence of thoughts of death.

It is possible that fostering a sense of neighborhood belonging among Hispanic adults may help decrease suicide risk. Community engagement may be particularly helpful to this end, given its association with neighborhood belonging regardless of generational status. Community engagement among Hispanics, however, is often limited due to various factors, including distrust (related to legal status or discrimination), linguistic barriers, lack of community knowledge, fewer socioeconomic resources (associated with long working hours and less leisure time), and the preference to prioritize family when leisure time is available (see Fernandez, 2018, for a review). Importantly, communities can seek to increase engagement of their Hispanic residents via grassroots community engagement approaches (Rowel, Sheikhattari, Barber, & Evans-Holland, 2012). Case studies of successful strategies used by grassroots nonprofit organizations to engage Hispanics in their neighborhoods identified community organizing (meeting personally with residents), democratic leadership (including residents in decision making), and antiracist stances (challenging stereotypes) as instrumental for engaging Hispanic residents (Fernandez, 2018). These strategies are also notably in line with Hispanic cultural values of *respeto* (i.e., respect of authority/hierarchy), simpatia (i.e., emphasizing kindness/avoiding conflict), and personalismo (i.e., importance of personal rather than institutional relationships). Furthermore, regular community-based activities that are accessible (linguistically, geographically, and financially), as well as align with Hispanic cultural values, such as familism (e.g., community dinners, family events at cultural community centers), religiosity (e.g., church-based groups/volunteering), and cultural pride (e.g., cultural festivals and education), may be particularly successful at promoting engagement among Hispanic residents.

Suicide prevention programs should also consider prioritizing community engagement as an intervention target. Indeed, Hispanic community stakeholders have suggested that suicide prevention interventions should promote social connection and cultural enrichment activities (Ford-Paz, Reinhard, Kuebbeler, Contreras, & Sánchez, 2015). Brief behavioral psychotherapies, such as Engage (Alexopoulos & Arean, 2014), can increase a sense of belonging by targeting patient involvement in cultural-social activities via action planning and addressing practical, emotional, and cultural barriers to engagement. However, as Hispanics are less likely to utilize mental health services (Alegría et al., 2007; Cabassa, Zayas, & Hansen, 2006), suicide prevention initiatives should partner directly with community agencies or organizations to deliver brief interventions like Engage and promote activities and events (such as those described above) in local communities that foster belonging.

Results should be considered in context of study limitations. First, although still one of the largest sampling of Hispanic community adults in the United States, the current data set is 2 decades old. In this time, the composition of the U.S. Hispanic population has changed.

For example, today, foreign-born Hispanics make up a smaller share of the U.S. Hispanic population than 20 years ago (with Guatemalans having the largest drop and Mexicans the smallest) (Flores, 2017). Further research is needed to determine how applicable these results are to Hispanics today, particularly third-generation on. Second, the current sample only included three Hispanic subgroups (Puerto Ricans, Mexicans, and Dominicans) living in large U.S. cities. As such, results may not be generalizable to other Hispanic groups or Hispanics living in rural locations. Third, assessing thoughts of death only in the context of depression biases population surveillance of suicidal ideation, resulting in underestimation of the presence of ideation (Dong et al., 2019). Furthermore, the item used to assess thoughts of death in the current study could reflect recent bereavement (e.g., recent widowhood). However, neighborhood belonging was still associated with thoughts of death after controlling for marital status (p < .007). Fourth, this study is cross-sectional, limiting causal inferences and directional interpretations. MIDUS, although a national longitudinal study of health and well-being, only oversampled for minorities in their first wave of data collection in 1995. Thus, it remains unclear how some of these association might change over time.

Hispanics are the largest racial/ethnic minority group in the United States and are expected to be a quarter of the population by 2060 (Colby & Ortman, 2015). Yet there continues to be a dearth of research examining demographic and social factors related to mental and emotional well-being among this population, particularly in relation to suicide risk. Suicide rates have risen among Hispanics, particularly among young adults and those in midlife. We expect a continued rise in suicidal behavior among Hispanics as current high-risk cohorts of Hispanic youth reach midlife (Silva & Van Orden, 2018). Future studies should investigate what forms of community engagement, such as social-group activities (e.g., attending a social gathering) or interpersonal-individual activities (e.g., interpersonal interaction with a family member or friend), have the greatest impacts on a sense of belonging in this population in order to prevent suicide (Mena, Padilla, & Maldonado, 1987; Rodriguez, Myers, Mira, Flores, & Garcia-Hernandez, 2002).

## **FUNDING**

This research was supported in part by grants from the National Institute of Mental Health [K23MH096936; T32MH020061] and the National Center for Advancing Translational Sciences [KL2 TR001999]. The data that support the findings of this study are openly available in ICPSR at https://doi.org/10.3886/ICPSR02856.v4.

#### REFERENCES

Acosta L, Hagan CR, & Joiner TE (2017). Burdensomeness, belongingness, and suicidal desire among hispanic/latino individuals: Examining the effect of ethnicity in the interpersonal theory of suicide. Psi Chi Journal of Psychological Research, 22(1).

Alegría M, Mulvaney-Day N, Woo M, Torres M, Gao S, & Oddo V (2007). Correlates of past-year mental health service use among Latinos: Results from the National Latino and Asian American Study. American Journal of Public Health, 97(1), 76–83. [PubMed: 17138911]

Alexopoulos GS, & Arean P (2014). A model for streamlining psychotherapy in the RDoC era: The example of 'Engage'. Molecular Psychiatry, 19(1), 14–19. doi:10.1038/mp.2013.150 [PubMed: 24280983]

Baldwin-White AJM, Kiehne E, Umaña-Taylor A, & Marsiglia FF (2017). In pursuit of belonging: Acculturation, perceived discrimination, and ethnic–racial identity among Latino youths. Social Work Research, 41(1), 43–52. [PubMed: 28533677]

- Barranco RE (2016). Suicide, religion, and Latinos: A macrolevel study of US Latino suicide rates. The Sociological Quarterly, 57(2), 256–281. doi:10.1111/tsq.12110
- Barranco R, & Harris CT (2021). Latino suicide and religion: Examining differences across destinations, religious traditions, and native-versus foreign-born groups. Sociological Inquiry, 91(4), 727–750. doi:10.1111/soin.12342
- Borowsky IW, Ireland M, & Resnick MD (2001). Adolescent suicide attempts: Risks and protectors. Pediatrics, 107(3), 485–493. [PubMed: 11230587]
- Cabassa LJ, Zayas LH, & Hansen MC (2006). Latino adults' access to mental health care: A review of epidemiological studies. Administration and Policy in Mental Health and Administration and Policy in Mental Health, 33(3), 316–330. [PubMed: 16598658]
- Centers for Disease Control and Prevention (CDC). (2020). Fatal injury reports, national, regional and state, 1981–2019. In Web-based Injury Statistics Query and Reporting System (WISQARS). Atlanta, GA: National Center for Injury Prevention and Control.
- Colby SL, & Ortman JM (2015). Projections of the size and composition of the U.S. population: 2014 to 2060. (P25–1143). Washington, DC: U.S. Census Bureau. Retrieved from http://www.census.gov/content/dam/Census/library/publications/2015/demo/p25-1143.pdf.
- Cupito AM, Stein GL, & Gonzalez LM (2015). Familial cultural values, depressive symptoms, school belonging and grades in Latino adolescents: Does gender matter? Journal of Child and Family Studies, 24(6), 1638–1649. doi:10.1007/s10826-014-9967-7
- Dong L, Kalesnikava VA, Gonzalez R, & Mezuk B (2019). Beyond depression: Estimating 12-months prevalence of passive suicidal ideation in mid-and late-life in the health and retirement study. The American Journal of Geriatric Psychiatry, 27(12), 1399–1410. doi:10.1016/j.jagp.2019.06.015 [PubMed: 31353189]
- Ennis SR, Rio-Vargas M, & Albert NG (2011). The Hispanic population: 2010. 2010 Census Briefs. Retrieved from http://www.census.gov/prod/cen2010/briefs/c2010br-04.pdf.
- Fernandez M (2018). Increasing community engagement in Latino residents to improve health outcomes. Local Environment, 23(9), 920–933. doi:10.1080/13549839.2018.1500530
- Flores A (2017). How the U.S. Hispanic population is changing. Fact Tank: News in the Numbers. Retrieved from https://www.pewresearch.org/fact-tank/2017/09/18/how-the-u-s-hispanic-population-is-changing/.
- Ford-Paz RE, Reinhard C, Kuebbeler A, Contreras R, & Sánchez B (2015). Culturally tailored depression/suicide prevention in Latino youth: Community perspectives. The Journal of Behavioral Health Services & Research, 42(4), 519–533. doi:10.1007/s11414-013-9368-5 [PubMed: 24132548]
- Fortuna L, Álvarez K, Ortiz ZR, Wang Y, Alegría XM, Cook B, & Alegría M (2016). Mental health, migration stressors and suicidal ideation among Latino immigrants in Spain and the United States. European Psychiatry, 36, 15–22. doi:10.1016/j.eurpsy.2016.03.001 [PubMed: 27311103]
- Garza MJ, & Pettit JW (2010). Perceived burdensomeness, familism, and suicidal ideation among Mexican women: Enhancing understanding of risk and protective factors. Suicide & Life-Threatening Behavior, 40(6), 561–573. [PubMed: 21198325]
- Gomez J, Miranda R, & Polanco L (2011). Acculturative stress, perceived discrimination, and vulnerability to suicide attempts among emerging adults. Journal of Youth and Adolescence, 40(11), 1465–1476. [PubMed: 21717234]
- Haslam C, Cruwys T, Haslam SA, & Jetten J (2015). Social connectedness and health. Encyclopaedia of Geropsychology, 2015, 46–41.
- Hawkley LC, & Cacioppo JT (2010). Loneliness matters: A theoretical and empirical review of consequences and mechanisms. Annals of Behavioral Medicine: A Publication of the Society of Behavioral Medicine, 40(2), 218–227. [PubMed: 20652462]
- Hong S, Zhang W, & Walton E (2014). Neighborhoods and mental health: Exploring ethnic density, poverty, and social cohesion among Asian Americans and Latinos. Social Science & Medicine (1982), 111, 117–124. [PubMed: 24769491]

Hovey JD (2000). Acculturative stress, depression, and suicidal ideation in Mexican immigrants. Cultural Diversity & Ethnic Minority Psychology, 6(2), 134–151. doi:10.1037/1099-9809.6.2.134 [PubMed: 10910528]

- Hughes D (2001). Cultural and contextual correlates of obligation to family and community among urban Black and Latino adults. In Rossi AS (Ed.), Caring and doing for others (pp. 179–226). Chicago: The University of Chicago Press.
- Hughes DL, & Shweder RA (2018). Midlife in the United States (MIDUS): Survey of Minority Groups [Chicago and New York City], 1995–1996. Retrieved from https:// www.icpsr.umich.edu/web/ICPSR/studies/2856.
- Hurtado S, & Carter DF (1997). Effects of college transition and perceptions of the campus racial climate on Latino college students' sense of belonging. Sociology of Education, 70(4), 324–345. doi:10.2307/2673270
- ICPSR. (2018). Midlife in the United States (MIDUS): Survey of Minority Groups [Chicago and New York City], 1995–1996 (ICPSR 2856). Ann Arbor, MI: University of Michigan. Retrieved from https://www.icpsr.umich.edu/web/ICPSR/studies/2856/publications.
- Joiner TE (2005). Why people die by suicide. Cambridge, MA: Harvard University Press.
- Joiner TE, Van Orden KA, Witte TK, & Rudd MD (2009). The interpersonal theory of suicide: Guidance for working with suicidal clients. Washington, DC: American Psychological Association.
- Lamont Strayhorn T (2008). Sentido de pertenencia: A hierarchical analysis predicting sense of belonging among Latino college students. Journal of Hispanic Higher Education, 7(4), 301–320. doi:10.1177/1538192708320474
- Locke TF, & Newcomb MD (2005). Psychosocial predictors and correlates of suicidality in teenage Latino males. Hispanic Journal of Behavioral Sciences, 27(3), 319–336. doi:10.1177/0739986305276745
- Maimon D, Browning CR, & Brooks-Gunn J (2010). Collective efficacy, family attachment, and urban adolescent suicide attempts. Journal of Health and Social Behavior, 51(3), 307–324. doi:10.1177/0022146510377878 [PubMed: 20943592]
- Mascayano F, Irrazabal M, D Emilia W, Vaner SJ, Sapag JC, Alvarado R, ... Sinah B (2015). Suicide in Latin America: A growing public health issue. Revista de la Facultad de Ciencias Medicas (Cordoba, Argentina), 72(4), 295–303. [PubMed: 27107280]
- Maurizi LK, Ceballo R, Epstein-Ngo Q, & Cortina KS (2013). Does neighborhood belonging matter? Examining school and neighborhood belonging as protective factors for Latino adolescents. American Journal of Orthopsychiatry, 83(2–3), 323–334. doi:10.1111/ajop.12017 [PubMed: 23889023]
- Mena FJ, Padilla AM, & Maldonado M (1987). Acculturative stress and specific coping strategies among immigrant and later generation college students. Hispanic Journal of Behavioral Sciences, 9(2), 207–225. doi:10.1177/07399863870092006
- Morrison GM, Cosden MA, O'Farrell SL, & Campos E (2003). Changes in Latino students' perceptions of school belonging over time: Impact of language proficiency, self-perceptions and teacher evaluations. The California School Psychologist, 8(1), 87–98. doi:10.1007/BF03340898
- Nuñez A-M (2009). A critical paradox? Predictors of latino students' sense of belonging in college. Journal of Diversity in Higher Education, 2(1), 46–61. doi:10.1037/a0014099
- Oakey-Frost N, Tucker RP, & Buckner JD (2021). Ethnic identity and suicide risk among Hispanic/ Latinx young adults: The impact of perceived burdensomeness and thwarted belongingness. Archives of Suicide Research, 25(2), 253–268. doi: 10.1080/13811118.2019.1670766 [PubMed: 31596177]
- Oquendo MA, Dragatsi D, Harkavy-Friedman J, Dervic K, Currier D, Burke AK, ...Mann JJ (2005). Protective factors against suicidal behavior in Latinos. The Journal of Nervous and Mental Disease, 193(7), 438–443. doi:10.1097/01.nmd.0000168262.06163.31 [PubMed: 15985837]
- Perez-Rodriguez MM, Baca-Garcia E, Oquendo MA, Wang S, Wall MM, Liu S-M, & Blanco C (2014). Relationship between acculturation, discrimination, and suicidal ideation and attempts among US Hispanics in the National Epidemiologic Survey of Alcohol and Related Conditions.

- The Journal of Clinical Psychiatry, 75(04), 399–407. doi:10.4088/JCP.13m08548 [PubMed: 24813407]
- Rodriguez N, Myers HF, Mira CB, Flores T, & Garcia-Hernandez L (2002). Development of the Multidimensional Acculturative Stress Inventory for adults of Mexican origin. Psychological Assessment, 14(4), 451–461. doi:10.1037/1040-3590.14.4.451 [PubMed: 12501570]
- Rowel R, Sheikhattari P, Barber TM, & Evans-Holland M (2012). Introduction of a guide to enhance risk communication among low-income and minority populations: A grassroots community engagement approach. Health Promotion Practice, 13(1), 124–132. [PubMed: 21737672]
- Sánchez B, Colón Y, & Esparza P (2005). The role of sense of school belonging and gender in the academic adjustment of Latino adolescents. Journal of Youth and Adolescence, 34(6), 619–628. doi:10.1007/s10964-005-8950-4
- Silva C, & Van Orden KA (2018). Suicide among Hispanics in the United States. Current Opinion in Psychology, 22, 44–49. [PubMed: 30122277]
- Silva C, Hurtado G, Hartley C, Rangel JN, Hovey JD, Pettit JW, ... Joiner TE (2018). Spanish translation and validation of the Interpersonal Needs Questionnaire. Psychological Assessment, 30(10), e21–e37. doi:10.1037/pas0000643 [PubMed: 30284876]
- Ungemack JA, & Guarnaccia PJ (1998). Suicidal ideation and suicide attempts among Mexican Americans, Puerto Ricans, and Cuban Americans. Transcultural Psychiatry, 35(2), 307–327. doi:10.1177/136346159803500208
- Van Orden KA, Witte TK, Cukrowicz KC, Braithwaite SR, Selby EA, & Joiner TE (2010). The interpersonal theory of suicide. Psychological Review, 117(2), 575–600. [PubMed: 20438238]
- Vega W, Gil AG, Zimmerman R, & Warheit G (1993). Risk factors for suicidal behavior among Hispanic, African-American, and non-Hispanic white boys in early adolescence. Ethnicity & Disease, 3(3), 229–241. [PubMed: 8167539]
- Wadsworth T, & Kubrin CE (2007). Hispanic suicide in US Metropolitan Areas: Examining the effects of immigration, assimilation, affluence, and disadvantage. American Journal of Sociology, 112(6), 1848–1885. doi:10.1086/512711

## **HIGHLIGHTS**

• Integration, engagement, and religiosity positively predicted belonging in Hispanic adults

- Lifetime events of discrimination was the only negative predictor of neighborhood belonging
- Lower neighborhood belonging was associated with thoughts of death among depressed participants

Silva et al. Page 15

TABLE 1.

Sample characteristics (N= 968).

	N	%
Sex		
Female	486	50.2
Male	482	49.8
Hispanic group		
Puerto Rican	451	46.6
Dominican	284	29.3
Mexican	233	24.1
Native language		
Spanish	804	83.1
English	152	15.7
Other	4	.4
Birth origin		
Foreign	259	73.2
U.S.	709	26.8
Generation		
First	709	73.2
Second	177	18.3
Third	82	8.5
Marital status		
Married	485	50.1
Never married	227	23.5
Divorced	125	12.9
Separated	83	8.6
Widowed	41	4.2
Unknown	7	.7

TABLE 2.

Descriptive statistics and intercorrelations.

	M (SD)	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. Neighborhood Belonging	3.30 (0.84)	_									
2. Sex	1.50 (0.50)	.00	-								
3. Age	42.15 (13.10)	.20**	06	=							
4. Ethnic Cohesion	3.47 (0.69)	.18**	.04	.11**	-						
5. Community Integration	10.53 (9.75)	.22**	02	.31**	.07**	-					
6. Language Proficiency	2.23 (1.24)	08*	10**	22**	.02	.14**	-				
7. Religiosity	3.15 (0.70)	.14**	.18**	.23**	.23**	.01	09 **	=			
8. Community Engagement	3.88 (1.90)	.49**	04	.10**	.25 **	.19**	04	.10**	_		
9. Discrimination—Daily Frequency	1.42 (0.63)	10**	11**	13**	.06	05	.12**	.01	04	-	
10. Discrimination—Discrete Events	0.63 (1.16)	13**	10**	02	.07*	01	.18**	01	04	.36**	-
11. Generation	1.35 (0.63)	10**	.03	11 **	.01	.11**	.49**	.00	03	.07*	.12**

Note. For sex, male is coded as 1 and female as 2.

<sup>\*\*</sup> p < .01

<sup>\*</sup> p < .05.

Silva et al. Page 17

Variable	В	SE	β	t	p	Partial $\eta^2$
Ethnic Cohesion	0.06	0.04	0.05	1.65	.099	.05
Community Integration	0.01	< 0.01	0.12	3.85	.000	.13
Language Proficiency	0.01	0.02	0.01	0.44	.668	.01
Religiosity	0.07	0.04	0.06	1.98	.048	.07
Community Engagement	0.19	0.01	0.43	15.00	.000	.44
Discrimination—Daily Frequency	-0.04	0.04	-0.03	-0.88	.380	03
Discrimination—Discrete Events	-0.07	0.02	-0.09	-3.12	.002	10
Age	0.01	< 0.01	0.08	2.63	.009	.09
Generation	-0.11	0.043	-0.08	-2.59	.010	09

*Note*: Bolded text indicates p < .05.

Silva et al.

**TABLE 4.**Multivariate regressions for foreign-born and U.S.-born respondents.

Page 18

Variable	В	SE	β	t	р	partial $\eta^2$
Foreign-Born $(n = 683)$						
Ethnic Cohesion	0.07	0.04	0.06	1.75	.081	0.07
Community Integration	0.01	< 0.01	0.14	3.62	.000	0.14
Language Proficiency	0.05	0.03	0.06	1.64	.102	0.06
Religiosity	0.03	0.04	0.03	0.87	.385	0.03
Community Engagement	0.17	0.01	0.41	11.81	.000	0.41
Discrimination—Daily Frequency	< 0.01	0.05	-0.00	-0.08	.934	< 0.01
Discrimination—Discrete Events	-0.08	0.03	-0.11	-2.99	.003	-0.11
Age	< 0.01	< 0.01	0.07	1.73	.085	0.07
U.SBorn ( $n = 247$ )						
Ethnic Cohesion	0.08	0.08	0.05	0.94	.348	0.06
Community Integration	0.01	0.01	0.09	1.70	.090	0.11
Language Proficiency	-0.05	0.05	-0.06	-1.02	.311	-0.07
Religiosity	0.17	0.07	0.13	2.35	.020	0.15
Community Engagement	0.24	0.03	0.48	8.95	.000	0.50
Discrimination—Daily Frequency	-0.09	0.07	-0.07	-1.34	.181	-0.09
Discrimination—Discrete Events	-0.05	0.04	-0.06	-1.16	.249	-0.07
Age	0.01	< 0.01	0.09	1.49	.139	0.10
Generation	-0.13	0.11	-0.07	-1.17	.241	-0.08

*Note:* Bolded text indicates p < .05.

Silva et al.

**TABLE 5.**Logistic regression for thoughts of death among those with depression.

Page 19

Block	Variable	В	SE	Wald	р	Exp(B)
0	Intercept	.182	.143	1.632	.201	1.200
1	Intercept	1.675	.570	8.645	.003	5.337
	Neighborhood Belonging	459	.167	7.514	.006	.632
2	Intercept	2.671	1.168	5.233	.022	14.454
	Neighborhood Belonging	431	.207	4.350	.037	.650
	Age	022	.013	3.012	.083	.978
	Ethnic Cohesion	.129	.209	.380	.537	1.137
	Community Integration	013	.016	.642	.423	.987
	Language Proficiency	.055	.143	.150	.699	1.057
	Religiosity	.047	.245	.037	.848	1.048
	Community Engagement	013	.091	.020	.997	.987
	Discrimination—Daily Frequency	521	.308	2.865	.091	.594
	Discrimination—Discrete Events	059	.139	.182	.670	.942
	Generation	.110	.237	.216	.642	1.116

*Note:* Bolded text indicates p < .05.