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Profiles of Psychosocial Stressors and Buffers Among Latinx Immigrant Youth: Associations with Suicidal Ideation

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Abstract

This study aims to examine the associations of latent profile group membership based on proximal psychosocial stressors (immigrant minority stress) and buffers (family, peer, and school support, and ethnic identity importance) with suicidal ideation, and distal stressors (pre- to post-migration victimization and forced immigration-related family separation) with suicidal ideation among immigrant youth from the Northern Triangle (NT). Surveys were administered in a public high school-based Latinx immigrant youth support program between Spring 2020 and Spring 2022 (*N*=172). A three latent profile model was previously identified using the previously specified

proximal psychosocial stressors and buffers: moderate stress/low buffering (weak resources), moderate stress/moderate buffering (average resources), and low stress/high buffering (strong resources). Associations of profile membership and the previously mentioned distal stressors with suicidal ideation were examined using multivariable logistic regression. Findings revealed that youth in the strong resources group experienced significant protection from suicidal ideation compared to youth in both the average and weak resources groups. Distal stressors were not significantly associated with suicidal ideation in multivariable analysis. Immigrant youth from the NT may require substantial buffering resources (i.e., ethnic identity importance, and school, family, and peer support) and minimization of proximal immigrant minority stress to experience protection from suicidal ideation.

Keywords

minority stress; health equity; life course; Northern Triangle; suicidal ideation; latent profile analysis; intersectionality

1. Introduction

Between 2013 and 2022, the proportion of immigrant youth apprehended at the U.S.-Mexico border increased by 551% (USCBP, 2017, 2023). Notably, 75% (2022; USCBP, 2023) 77% (2021; USCBP, 2021) and 90% (2019; USCBP, 2020) of immigrant youth apprehended at the U S.-Mexico border hailed from the Northern Triangle (i.e., El Salvador, Guatemala, Honduras; NT). These figures elucidate the current NT youth immigration-related crisis. Considering the rising population of immigrant youth from the NT, which account for the majority of all youth apprehended at the U S.-Mexico border (Kandel, 2019), it is of utmost importance to investigate the experiences of these youth that explain their mental health. Such research would help public health leaders and practitioners understand and address this vulnerable and emerging population's mental health needs, and well-position them equitably for health and success across the life course.

First-generation Latinx immigrant youth from the NT who migrate to the U.S. often experience stressors that increase their risk for severe mental health burdens, such as suicidal ideation. For instance, previous studies have identified the negative effects of pre, in-transit, and post-migration traumas and stressors (Cleary et al., 2018), including immigration-related family separation (Roche et al., 2020), on the mental health of Latinx immigrant youth. Utilizing the *Life-Course Perspective* (Elder et al., 2003), we posit that distal stressors across the phases of migration (e.g., pre- to post-migration victimization) could have a negative effect on the mental health (e.g., suicidal ideation) of Latinx immigrant youth from the NT. Additionally, the *minority stress theory* (Brooks, 1981; Meyer, 2003) adds that during post-migration in the U.S., immigrant youth from the NT are subjected to proximal immigrant minority stress experiences (e.g., negative immigrant-related feelings due to lack of acceptance), which negatively impact their mental health. Previous research has identified that experiencing proximal immigrant minority stress (Fortuna et al., 2016; Rothe & Pumariega, 2018; Silva & Van Orden, 2018) and distal stressors (Cardoso et al.,

2018;Fortuna et al., 2016; Roche et al., 2020; Rothe & Pumariega, 2018; Silva & Van Orden, 2018) negatively impact suicidal ideation among Latinx immigrant youth.

Yet, the life-course perspective highlights the potential for critical turning points, during which positive psychosocial experiences (e.g., peer and family support) could have a distinct and strong impact on mental health during post-migration. Indeed, the minority stress theory posits that coping and social support resources (e.g., school support) and minority identity-related characteristics (e.g., ethnic identity), could buffer against the negative effects of proximal minority stress on mental health. Previous research has shown that a strong sense of ethnic identity (Fortuna et al., 2016; Silva & Van Orden, 2018), and school (Hall et al., 2018; Marraccini et al., 2022), family (Maimon et al., 2010; Silva & Van Orden, 2018), and peer (Miller et al., 2015; Rothe & Pumariega, 2018) support can mitigate suicidal ideation among Latinx immigrant youth.

Thus, mental health challenges, such as suicidal ideation, among first-generation Latinx immigrant youth from the NT deserve public health examination. Given the rise in suicidal ideation and behavior among U.S. Latinx youth in the last decade (Rothe & Pumariega, 2018; Silva & Van Orden, 2018), and that it is the third leading cause of death among Latinx youth in the U.S. (Rothe & Pumariega, 2018; Silva & Van Orden, 2018), lack of understanding regarding the intervenable psychosocial factors associated with suicidal ideation is an urgent gap in the scientific literature, particularly among first-generation Latinx immigrant youth from NT, whom are an emerging and vulnerable population of Latinx immigrant youth in the U.S.

An exploratory latent profile analysis was previously conducted by the authorship team to reveal and describe unique and normally unobservable groups of immigrant youth from the NT based across levels of 1) *proximal immigrant minority stress*: current negative feelings and perceived discrimination associated with being an immigrant, 2) *family support*: current perceptions of feeling supported by family members, 3) *peer support*: current perceptions of feeling supported by peers, 4) *school support*: current perceptions of feeling supported in school, and 5) *ethnic identity importance*: current sense of personal ethnic identity association. A three-latent profile model emerged, characterized by moderate immigrant minority stress and low psychosocial buffering (i.e., *weak resources*), moderate immigrant minority stress and moderate psychosocial buffering (i.e., *average resources*), and low immigrant minority stress and high psychosocial buffering (i.e., *strong* resources) levels of post-migration proximal immigrant minority stress and psychosocial buffering factors (i.e., family, peer, and school support, and ethnic identity importance). See the supplementary document for more details.

1.1 The current study

Using the previously described latent profile groups, this study examines the associations between latent profile group membership, and pre- to post-migration victimization and forced immigration-related family separation (distal stressors) with suicidal ideation. This study reveals important information that could encourage future suicide prevention research on immigrant youth from the NT, and provide valuable prevention practice information useful for school, child welfare, immigration, parental, and family member caretakers

and providers of immigrant youth from the NT, as well as important implications for immigration policy reform to better protect this population's mental health and wellbeing.

2. Methods

2.1 Data collection and sampling procedures

This study employed a purposive sampling strategy designed to survey youth who were participants in the Mi Refugio program at a public high school in Hyattsville, Maryland. On predetermined data collection days (Spring 2019-Spring 2022), the survey was implemented fully in Spanish and in a classroom-type setting (Spring 2019-Spring 2020) or online via Zoom platform (Spring 2022). This specific analysis is limited to participants who are first-generation Latinx immigrant youth high school students originating from the NT ($N=$ 172).

Participant informed consent (>18+ years) or assent (<18 years) and University of Maryland Institutional Review Board approval were obtained prior to commencing study recruitment and data collection. More detailed data collection and sampling procedures are described elsewhere (see supplementary document).

2.2 Measures

2.2.1 Latent profile measures - post-migration

2.2.1.1 Proximal immigrant minority stress: Measured using the previously validated Acculturative Stress Inventory for Children (ASIC).(Suarez-Morales et al., 2007) The ASIC is comprised of 12-items on a 5-point Likert scale from strongly disagree to strongly agree. The ASIC validation study demonstrated strong internal consistency and test-retest reliability, as well as sufficient estimates of convergent, discriminant, and predictive validity (Suarez-Morales et al., 2007). Immigrant minority stress was analyzed as continuous using a composite score ranging from 0 to 48 (α=.790).

2.2.1.2 ethnic identity importance (proximal buffer): Measured using 5 items from the Multigroup Ethnic Identity Measure (Roberts et al., 1999) and 3 items from the Multidimensional Model of Racial Identity (Sellers et al., 1998). The scale was previously validated through a factor analysis confirming that all ethnic identity items identify a single factor with high reliability (Arandia et al., 2018). All ethnic identity items are on a 5-point Likert scale from strongly disagree to strongly agree. Ethnic identity was analyzed as continuous using a composite score ranging from 0 to 32 (α=.922).

2.2.1.3 Peer support (proximal buffer): Measured using four previously validated items from the Multidimensional Scale of Perceived Social Support (MPSS; Canty-Mitchell & Zimet, 2000; Trejos-Herrera et al., 2018) The peer support scale uses a 7-point Likert scale from very strongly disagree to very strongly agree. The MPSS validation study identified the peer support subscale through a factor analysis, which demonstrated high internal consistency, and identified acceptable estimates of discriminant validity (Canty-Mitchell & Zimet, 2000). Peer support was analyzed as continuous using a composite score ranging from 0 to 24 (α=.942).

2.2.2.4   Family support (proximal buffer): Measured using four items from the MPSS and analyzed as continuous using a composite score ranging from 0 to 24 (α=.952; Canty-Mitchell & Zimet, 2000; Trejos-Herrera et al., 2018). The MPSS validation study identified the family support subscale through a factor analysis, which demonstrated high internal consistency, and identified sufficient estimates of discriminant validity (Canty-Mitchell & Zimet, 2000).

2.2.1.5   School support (proximal buffer): Measured using 8-items from the previously validated Psychological Sense of School Membership (PSSM) scale (Gaete et al., 2016; Goodenow, 1993). The PSSM scale uses a 5-point Likert scale from strongly disagree to strongly agree. The original validation study of the PSSM demonstrated strong internal consistency, as well as construct validity via contrasted groups validation procedures (Goodenow, 1993). The first author conducted an exploratory factor analysis, which indicated that the eight PSSM items identified a single factor with strong reliability. School support was analyzed as continuous using a composite score ranging from 0 to 32 (α=.890).

2.2.2   Pre- to post-Migration victimization and forced immigration-related family separation

2.2.2.1   Pre-migration persecution victimization (distal stressor): Measured using one previously validated binary yes/no item (yes=1) informed by the Centers for Disease Control and Prevention (CDC) guidelines on the care of immigrants: Did you leave your country because of violence or because of threats to the health and safety of yourself or your family (CDC, 2015)?

2.2.2.2   In-transit migration victimization (distal stressor): Measured using one binary yes/no migration item (yes=1) informed by the CDC guidelines on the care of immigrants: Did you experience violence and/or threats to you or your family during the process of leaving your country (CDC, 2015)?

2.2.2.3   Post-migration victimization (distal stressor): Measured using 5-items from the previously validated exposure to violence scale (EVS; Gudiño et al., 2011; Singer et al., 1995). The EVS items are on a 4-point scale from never to very frequently. Post-migration victimization had a positively skewed distribution. Therefore, this variable was analyzed as dichotomous (experienced=1, not experienced=0).

2.2.2.4   forced immigration-related family separation (distal stressor): Measured using one binary yes/no item (yes=1): Did you get separated from your primary caregiver because of immigration or deportation?

2.2.3   Suicidal ideation measure

2.2.3.1   Suicidal ideation: Measured using the suicidal ideation item from the previously validated Patient Health Questionnaire 9 (PHQ-9; Kim et al., 2021; Kroenke et al., 2001; Simon et al., 2013), "Thoughts that you would be better off dead, or of hurting yourself". The item is measured on a 4-point scale from not at all to nearly every day (past 2 weeks).

Suicidal ideation was recoded and analyzed as a dichotomous variable (0 = no suicidal ideation, 1 = suicidal ideation) to address sparsity concerns.

2.2.4   Sociodemographic categories—*Sexual orientation* was coded as a dichotomous variable (heterosexual vs. non-heterosexual). *Sex assigned at birth* was dichotomized as male vs. female. *Country of origin* was coded as a three-category variable (El Salvador, Guatemala, Honduras). *Time living in the U.S.* was coded as a dichotomous variable (0-3 years vs. 4+ years). *Age* was coded as a 4-category variable (14-15 years, 16-17 years, 18 years, and 19-21 years). *School Grade* was coded as a 4-category variable (grades 9, 10, 11, or 12).

2.3   Analytic framework

Latent profile analysis (LPA; Masyn, 2013) was conducted using MPlus version 8.4 to identify a unique and unmeasured set of exclusive groups (latent profile groups) among sample immigrant youth from the NT based on their response patterns across proximal post-migration immigrant minority stress and psychosocial buffering factors (i.e., peer, family, and school support, and ethnic identity importance). Latent profile analysis methods have been fully described elsewhere (see supplementary document).

Chi-Square analysis was used to examine the bivariate associations between profile membership, pre- to post-migration victimization, and forced immigration-related family separation with suicidal ideation. Using logistic regression, the multivariable independent associations of latent profile membership, pre- to post-migration victimization, and family separation with suicidal ideation were examined (controlling for the effects of sociodemographic variables significantly associated with suicidal ideation). Multivariable logistic regression models are presented twice (Model A and Model B) to understand associations when reference categories change. Alpha was set to 0.05 for all analyses.

3.   Results

3.1   Latent profile analysis

Latent profile analysis model fit indices for models with two to five profiles are reported in Supplementary Document Table 2a. Although the 5-profile model was the strongest of all models according to the information criterion values, three of the five profiles in the 5-profile model had sample sizes that were too low and below the 10% of total sample threshold (n=13, n=7, n=2; Sinha et al., 2021). Utilizing the 5-profile model would severely impact our ability to conceptually understand and interpret the low sample profiles, as well as statistical power in further associative analyses. All three profiles in the 3-profile model had more adequate sample sizes that met the 10% threshold (n=21, n=71, n=80), which mitigated statistical power and conceptual/interpretability issues. Additionally, the 3-profile model demonstrated significant LMR and LRT tests and high entropy, suggesting goodness of fit and that this may be a strong alternative to the 5-profile model. Lastly, the lack of significant LMR and LRT tests in the 4-profile model and the elbow plot test supported the selection of the 3-profile model (Figure S1). Therefore, we moved forward with examining model specifics for the 3-profile LPA model to determine acceptability.

The 3-profile model converged successfully and the best loglikelihood value was replicated, rerun with at least twice the random starts to check that the best loglikelihood was still obtained and replicated. The 3-profile model demonstrated strong profile average posterior probabilities (1=0.952, 2=0.957, 3=0.952), well above the 0.80 and 0.90 recommended cutoffs (Weller et al., 2020), and entropy (0.895), also well above the 0.80 recommended cutoff (Nylund-Gibson & Choi, 2018; Weller et al., 2020) suggesting acceptable and well-separated profiles (Nylund-Gibson & Choi, 2018). Lastly, acceptable intra-profile correlations ranging from .019 to .559 that did not raise collinearity concerns (confirmed by MPlus) were identified (Table S1; available in supplementary document), suggesting good differentiation between the profiles. We then assessed the three-profile model closely for interpretability and identified a clear pattern (Figure 1; available in supplementary document). Therefore, the 3-profile model was determined to be interpretable and conceptually sound, acceptable in-terms of model fit, and selected as the final model. Latent profile analysis results are fully described elsewhere (see supplementary document).

A three-latent profile model emerged, characterized by moderate stress/low buffer (i.e., *weak resources*), moderate stress/moderate buffer (i.e., *average resources*), and low stress/ high buffer (i.e., *strong* resources) levels of post-migration immigrant minority stress and psychosocial buffering factors (i.e., family, peer, and school support, and ethnic identity centrality). Total sample and profile specific sociodemographic category, pre- to post migration victimization, and forced immigration-related family separation frequencies and means are reported in Supplementary Document Table 1a. Total sample and profile-specific post-migration proximal immigrant minority stress and psychosocial buffering factor means and standard deviations are reported in Supplementary Document Table S2. Supplementary Document Figure 1 provides a visual of each latent profile across levels of post-migration proximal immigrant minority stress and psychosocial buffering factors.

3.1 Associations with suicidal ideation

Total sample sociodemographic category, pre- to post-migration victimization, and immigration-related family separation means and frequencies are reported in Table 1. Bivariate associations between sociodemographic characteristics, pre- to post-migration victimization, and immigration-related family separation with suicidal ideation are also reported in Table 1. Bivariate associations between latent profile group membership and suicidal ideation are reported in Table 2. Multivariable independent associations with suicidal ideation are reported in Table 3 and below.

In Model A, there was a significant association of latent profile group membership with suicidal ideation for the *strong resources* profile (low stress/high buffer; $Wald = 15.871$, $df = 1$, $p < .001$), but not the *average resources* profile (moderate stress/moderate buffer; $Wald = 3.654$, $df = 1$, $p = .056$); specifically, participants in the *strong resources* group (low stress/high buffer) had 0.053 [$CI = (0.013, 0.225)$] times lower odds (i.e., 94.7% decrease in the odds) of experiencing suicidal ideation compared to participants in the *weak resources* group (moderate stress/low buffer). In Model B, there was a significant association of latent profile group membership with suicidal ideation for the *strong resources* profile (low stress/high buffer; $Wald = 8.612$, $df = 1$, $p = .003$), but not the *weak resources* profile

(moderate stress/moderate buffer; *Wald* = 3.654, *df* = 1, *p* = .056); specifically, participants in the *strong resources* group (low stress/high buffer) had 0.160 [*CI* = (0.047, 0.544)] times lower odds (i.e., 84% decrease in the odds) of experiencing suicidal ideation compared to participants in the *weak resources* group (moderate stress/low buffer). Time living in the U.S. was associated with suicidal ideation (*Wald* = 4.937, *df* = 1, *p* = .026); specifically, those who lived in the U.S. for 4 years or longer had 2.850 [*CI* = (1.131, 7.181)] times greater odds of experiencing suicidal ideation compared to those who lived in the U.S. for 3 years or less. Post-migration victimization was not associated with suicidal ideation.

4. Discussion

The current study aimed to examine the associations of latent profile group membership, pre- to post-migration victimization, and forced immigration-related family separation with suicidal ideation. In multivariable analyses, there was a significant association between latent profile group membership and suicidal ideation, such that those in the *strong resources* group were significantly less likely to experience suicidal ideation compared to those in the *weak resources* and *average resources* profile groups. The *average resources* and *weak resources* groups did not significantly differ from each other in-terms of suicidal ideation. Post-migration victimization was associated with suicidal ideation at the bivariate level, but significance was lost in multivariable analyses. In-transit migration victimization was associated with suicidal ideation at the bivariate level, but low prevalence prevented further consideration in multivariable analyses. Pre-migration victimization and forced family separation were not associated with suicidal ideation.

This study found that Latinx immigrant youth from the NT who formed part of the *strong resources* profile group were significantly less likely to experience suicidal ideation compared to youth in the *weak resources* and *average resources* profile groups. Conceptually, the result signifies that Latinx immigrant youth with low levels of post-migration proximal immigrant minority stress and high levels of peer, family, and school support, and ethnic identity importance experience protection from suicidal ideation compared to youth suffering from moderate levels of proximal immigrant minority stress and low-to-moderate levels of these psychosocial buffering factors. Findings are parallel with existing research documenting the negative impacts of proximal immigrant minority stress (Fortuna et al., 2016; Rothe & Pumariega, 2018; Silva & Van Orden, 2018) and positive impacts of psychosocial buffering factors (Fortuna et al., 2016; Hall et al., 2018; Maimon et al., 2010; Marraccini et al., 2022; Miller et al., 2015; Rothe & Pumariega, 2018; Silva & Van Orden, 2018) on suicidal ideation. The finding also aligns with the minority stress theory (Brooks, 1981; Meyer, 2003), which explains that experiences of minority stress could negatively impact mental health, but that coping and social support factors (e.g., family support) and minority identity-related characteristics (e.g., ethnic identity importance) have potential to mitigate the negative effects of proximal immigrant minority stress on mental health. Additionally, the finding supports the idea of the life-course turning point (Rutter, 1996; Teruya & Hser, 2010), during which positive psychosocial experiences could have a strong and distinct buffering effect on mental health through mitigating against proximal immigrant minority stress during post-migration.

Although youth in the *strong resources* group consistently experienced significant protection from suicidal ideation (compared to the average and weak resources profile groups), this protection was not seen among the *average resources* profile group. These inconsistencies regarding the average resource profile group highlight how latent profiles of psychosocial stressors and buffers relate to mental health outcomes differentially among the sample; immigrant youth from the NT may require nuanced levels psychosocial stressors and buffers to protect against different mental health outcomes. Indeed, findings from the current study suggest that low-to-moderate levels psychosocial buffering may be insufficient to protect against suicidal ideation in the presence of moderate-level proximal immigrant minority stress. Importantly, current study findings emphasize that Latinx immigrant youth from the NT may require substantial and strong peer, family, and school support resources and highly affirming environments where proximal immigrant minority stress is minimal and foreign cultures/ethnicities are welcomed and celebrated in order to experience significant protection from suicidal ideation risk. Study findings call for an equity-oriented suicide prevention response approach that adapts to meet the unique needs of first-generation Latinx immigrant youth from the NT.

Pre-migration victimization and forced family separation were not associated with suicidal ideation among sample youth, countering existing literature demonstrating negative effects of these distal stressors on mental health (Cleary et al., 2018; Perreira & Ornelas, 2013; Roche et al., 2020). Potential rationales for this lack of significance include measurement and construct differences, potential confounding due to differences in sociodemographic characteristics, and sample size and statistical power concerns. Although post-migration victimization was significantly associated with suicidal ideation in bivariate-level analyses among sample youth, the association was lost in multivariable analyses. We suspect that sample size issues may have impacted this factor in multivariable analyses. Time living in the U.S. demonstrated to be a statistically significant predictor of suicidal ideation in multivariable analyses, such that living in the U.S. for 4+ years was associated with greater odds of experiencing suicidal ideation compared to living in the U.S. for 3 years or less; this finding is consistent with existing literature on acculturation and Latino mental health that has found similar patterns in the past (Fortuna et al., 2016; Lawton & Gerdes, 2014). The finding on time living in the U.S. highlights the urgency of early public health intervention and access to health and mental health care services to prevent suicidal ideation during later post-migration among first-generation Latinx immigrant youth from the NT. Yet, mental health (and health) care are not available to undocumented immigrant youth from the NT in the U.S. There is a grave need for U.S. health and immigration policy reform that extends access to health and mental health care for all immigrants.

Lastly, multiple subgroups within first-generation Latinx immigrant youth from the NT emerged in latent profile analysis (see supplementary document) based on their strengths and vulnerabilities at the intersections of post-migration immigrant minority stress and psychosocial buffering factors, which led to differential experience of suicidal ideation. Study findings highlight intracategorical intersectionality (McCall, 2005); the significance of holding multiple marginalized identities (i.e., first-generation Latinx immigrant youth from the NT) as the manifestation of diversity in risk for suicidal ideation between latent profile subgroups, characterized by distinct levels of post-migration proximal immigrant minority

stress and psychosocial buffering factors. This perspective may be useful to public health experts in their suicide epidemiology and intervention work, which should implement a health equity-oriented suicide prevention response approach that adapts to identify and meet the unique needs of first-generation Latinx immigrant youth from the NT.

4.1 Limitations

Despite various strengths, the current study has limitations to consider. Low prevalence of suicidal ideation could affect the statistical accuracy of findings, which can be sensitive to sample size bias. Relatedly, insufficient sample size and statistical power concerns may have prevented detection of some significant associations, yet significant statistical associations with latent profile membership were still found. Future research is needed with larger samples to confirm current findings, and better understand the associations of distal stressors (e.g., pre- to post-migration victimization and forced family separation) with suicidal ideation among Latinx immigrant youth from the NT.

Additionally, the cross-sectional study design and non-probability sampling strategy impacted ability to establish causality and generalize findings to broader populations of Latinx immigrant youth from the NT. This study is also subject to recall and social desirability biases, as a retrospective self-report data collection strategy was implemented. Youth were also recruited from the Mi Refugio mental health and wellness program; therefore, effects may have been dampened by partial or full receipt of the program, but significant effects were still detected. Further, a small proportion of the data were collected after the onset of COVID-19 and online (compared to prior to COVID-19 and in-person), which presents risk for confounding bias. However, no confounding associations were detected in sensitivity analyses.

Lastly, another limitation is that this study did not collect socioeconomic or immigration status information. However, available sociodemographic data for the school and county (Migration Policy Institute, 2017; U.S. News, 2022), as well as conversations with program staff, strongly suggest that these youth come from low socioeconomic status backgrounds and that a significant proportion may be undocumented. Despite these limitations, this study provides important implications to consider for the mental health and wellbeing of immigrant youth from the NT.

4.2 Implications

There are several important implications to consider in the context of this study. Schools are a particular setting that can harm or protect the mental health and suicidal ideation of immigrant youth. In this study, immigrant youth who experienced greater levels of school and peer support, along with other psychosocial buffering factors (e.g., family support), and low proximal immigrant minority stress, were protected from suicidal ideation. Therefore, when youth attend schools where they feel supported, have positive interactions and relations with their peers, and where their sense of ethnic identities are encouraged, they may experience protection against suicidal ideation. It's important for schools to take steps to reduce feelings of immigrant minority stress among immigrant youth students, and to increase their sense of feeling affirmed, welcomed, accepted, and that they belong,

which could in-turn protect them against mental health burden and suicidal ideation. School-based medical and mental health practitioners have an important opportunity to intervene and positively impact mental health among Latinx immigrant youth via implementation of culturally appropriate school-based mental health and suicide prevention interventions (e.g., peer support, youth group therapy, family therapy; Aganza et al., 2019; Franco, 2018).

Findings from this study also demonstrate the importance of family support as an important psychosocial buffering factor that can vary among first-generation Latinx immigrant youth from the NT during post-migration. When sample youth demonstrated high levels of family support, along with other psychosocial buffers, and low proximal immigrant minority stress, they experienced protection from suicidal ideation. Therefore, it is important for public health experts to consider the ways in which they can support immigrant families, so that in-turn, parents and caretakers are better able to support their youth. Unfortunately, immigrant families often experience unique socioeconomic challenges that impede family support and mental health, such as undocumented status, lack of access to necessary federal benefits like health insurance and a work permit (Khullar & Chokshi, 2019), and fear of deportation (Berger Cardoso et al., 2018). Public health partnerships with therapists could help support immigrant youth and their families through providing culturally, socially, and legally competent therapy (Cervantes, 2019; Parra-Cardona, 2019). Lastly, public health and immigration policy reform that provides immigrant youth and families access to federal benefits, including documentation status and health and mental health care, are needed to support the mental health and wellbeing of first-generation Latinx immigrant youth from the NT, an emerging public health priority population in the U.S.

Acknowledgments

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Highlights

- Latent profile analysis is used to identify unique groups of Latinx immigrant youth

- Youth with strong psychosocial resources were protected from suicidality

- Youth with average/weak psychosocial resources were not protected from suicidality

- Youth who lived in the U.S. for longer were at greater risk for suicidality

Table 1

Sociodemographic Characteristics, Pre- to Post-Migration Victimization, Forced Family Separation, and Bivariate Associations with Suicidal Ideation

	Total Sample n (%) $N = 172$	Suicidal n (%) $n = 32$	Non-Suicidal n (%) $n = 139$	P-value (χ^2)
Age [M (SD)]	17.63 (1.55)	17.40 (1.59)	17.66 (1.53)	.849
14-15 years	15 (9.10)	4 (13.30)[a]	11 (8.30)	
16-17 years	56 (34.10)	10 (33.30)	46 (34.60)	
18 years	43 (26.20)	8 (26.70)	35 (26.30)	
19-21 years	50 (29.10)	8 (26.70)	41 (30.80)	
Grade				.602
9th	60 (34.90)	13 (31.20)	47 (33.80)	
10th	17 (9.90)	3 (9.40)[a]	14 (10.10)	
11th	19 (11.00)	5 (15.60)	14 (10.10)	
12th	76 (44.20)	11 (34.40)	64 (46.00)	
Sexual Orientation				.017
Heterosexual	155 (92.30)	25 (80.60)	129 (94.90)	
Non-heterosexual	13 (7.70)	6 (18.80)	7 (5.10)	
Sex assigned at birth				.932
Male	64 (37.20)	12 (36.70)	51 (36.70)	
Female	108 (62.80)	20 (62.50)	88 (63.30)	
Country of origin				.370
El Salvador	131 (76.20)	25 (78.10)	105 (75.50)	
Guatemala	22 (12.80)	2 (6.30)[a]	20 (14.40)	
Honduras	19 (1100)	5 (15.60)	14 (10.10)	
Time living in the U.S.				.039
0-3 years	119 (71.30)	18 (56.30)	100 (74.60)	
4+ years	48 (28.70)	14 (43.80)	34 (25.40)	
Forced Family Separation				.667
Yes	37 (22.00)	8 (25.00)	29 (21.50)	
No	130 (78.00)	24 (75.00)	106 (78.50)	
Pre-Migration Victimization				.531
Yes	120 (70.20)	24 (75.00)	95 (68.80)	
No	51 (29.80)	8 (25.00)	43 (31.20)	

	Total Sample *n* (%) *N* = 172	Suicidal *n* (%) *n* = 32	Non-Suicidal *n* (%) *n* = 139	P-value (χ^2)
In-Transit Migration Victimization				.016
Yes	13 (7.70)	6 (19.40)	7 (5.10)	
No	156 (92.30)	25 (80.60)	130 (94.90)	
Post-Migration Victimization				.002
Yes	51 (29.80)	17 (53.10)	33 (23.90)	
No	120 (70.20)	15 (46.90)	105 (76.10)	

[a] one violation of the Chi-Square Test assumption of at least 5 per cell

Table 2

Chi-Square Tests of Bivariate Associations Between Latent Profile Group Membership and Suicidal Ideation
(*N* = 172)

	Total Sample	Weak Resources[a] *n* (%)	Average Resources[b] *n* (%)	Strong Resources[c] *n* (%)	P-value
Suicidal Ideation					<.00
Suicidal	32	9 (42.90)	19 (27.10)	4 (5.00)[d]	-
No Suicidal	139	12 (57.10)	51 (72.90)	76 (95.00)	-

[a] moderate stress/low buffer profile group

[b] moderate stress/moderate buffer profile group

[c] low stress/high buffer profile group

[d] one violation of the Chi-Square Test assumption of at least 5 per cell

Table 3

Multivariable Logistic Regression Model Testing the Independent Associations of Latent Profile Group Membership, Post-Migration Victimization, and Time Living in the U.S. with Suicidal Ideation (*N* = 172)

	B	*SE*	*OR*	**95% CI**	*p*-value
Model A					
Average Resources (moderate stress/moderate buffer)[b]	−1.101	0.576	0.333	0.108, 1.028	.056
Strong Resources (low stress/high buffer)[c]	−2.933	0.736	0.053	0.013, 0.225	<.001
Weak Resources (moderate stress/low buffer)[a]	ref				
Model B					
Weak Resources (moderate stress/low buffer)[a]	1.101	0.576	3.007	0.972, 9.297	.056
Strong Resources (low stress/high buffer)[c]	−1.832	0.624	0.160	0.047, 0.544	.003
Average Resources (moderate stress/moderate buffer)[b]	ref				
Post-Migration Victimization (*Model A and Model B*)	0.671	0.466	1.956	0.785, 4.873	.150
No Post-Migration Victimization	ref				
Time Living in the U.S. (4+ years) (*Model and Model B*)	1.047	0.471	2.850	1.131, 7.181	.026
Time Living in the U.S. (0-3 years)	ref				

[a] moderate stress/low buffer profile group

[b] moderate stress/moderate buffer profile group

[c] low stress/high buffer profile group