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Mental Health Help-Seeking Among Latina/o/x Undocumented College Students

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Abstract

Objectives: Informed by a social-ecological framework, this study nested undocumented students' individual mental health needs within micro-level campus factors and the macro-level immigration policy context to examine how these are associated with undocumented Latina/o/x college students' use of on-campus mental health services.

Methods: A large-scale survey was administered to 1,277 undocumented college students attending 4-year public universities in California. Only Latina/o/x respondents were included in this study ($N=1181$). Fifty percent of students attended a UC system ($n = 589$). On average students were 21.84 years old ($SE = .15$) and most were women (75.3%, $n = 890$).

Results: Greater level of mental health symptoms and perceived mental health need, and greater use of campus-wide resources and undocumented student services predicted greater likelihood of using on-campus mental health services. Greater perceptions of social exclusion due to the immigration policy context predicted lower use of mental health services.

Conclusions: Results indicate that a greater use of resources and an inclusive campus environment, as well as efforts to minimize policy-related feelings of social exclusion, may facilitate undocumented students' professional mental health help-seeking. These findings emphasize the need to take multiple and multi-level ecological factors into account when considering mental health service use, particularly in the case of undocumented immigrants and likely other structurally marginalized groups.

Keywords: immigration mental health, undocumented populations, mental health, and college students

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Public Significance Statement

Undocumented college students face unique challenges due to their immigration status that not only compromise their mental health but also limit with their capacity to seek help from mental health professionals. This study nested undocumented students’ individual mental health within campus and immigration policy contexts to examine how these are associated with students’ use of on-campus mental health services. Findings show that greater perceptions of social exclusion deter undocumented students from seeking mental health services, whereas using more general campus-wide resources and undocumented student services increased the likelihood that they would seek services. Anxiety and depression symptoms as well as perceptions of mental health need were also strongly associated with mental health service use.

Mental Health Help-Seeking Among Latina/o/x Undocumented College Students

Mental health problems, particularly depression and anxiety, have been increasing steadily in college student populations over the last decade (Oswalt et al., 2020). Those who receive mental health treatment experience reductions in psychological distress (Minami et al., 2009; Snell et al., 2001), improvements in academic performance (Choi et al., 2010), and a lower likelihood of withdrawing from school (Turner & Berry, 2000). Yet, ethnic minority college student populations not only present more severe mental health problems in university counseling centers relative to White students (Kim et al., 2016), they are also more likely to underutilize these services (Pilar et al., 2020). Among this group, undocumented Latina/o/x students face multiple additional systemic challenges that not only place them at higher risk of mental health concerns relative to their documented peers (Potochnick & Perreira, 2010; Suárez-Orozco et al., 2011) but also deter them from seeking mental health treatment (Cha et al., 2019).

Nearly half of the estimated 450,000 undocumented students in higher education in the United States are Hispanic/Latina/o/x, comprising nearly 1% of all students in higher education (Feldblum et al., 2020). Yet, despite extensive research on the unique structural barriers and correspondent psychosocial challenges faced by this group (Bjorklund Jr, 2018; Pérez et al., 2010), little is known about what helps or hinders their decisions to seek out professional mental health support, and even fewer studies have considered how their treatment seeking is shaped by the unique, interrelated contexts within which undocumented students are embedded. Consistent with Yang & Hwang's (2016) theoretical framework on health service utilization in immigrant communities and building upon Suárez-Orozco et al.'s (2011) socio-ecological framework, we situate undocumented Latina/o/x students perceptions and self-reported behavior within nested environmental systems and explore how various risk and protective factors associated with

undocumented status are associated with students' propensity to seek professional mental health services.

Suarez-Orozco et al.'s (2011) socio-ecological framework examines the impact that an undocumented status has on the development of immigrant children and youth through a multilevel, contextual lens, whereby interactions between the individual and multiple risk and protective factors unfold within and across micro, meso, exo, and macrosystems. Within this framework, the school environment represents a critical microlevel context for undocumented youth that is further nested within a macrosystem characterized, at a national level, by punitive anti-immigrant governmental policies and negative societal attitudes. Specifically, macrolevel factors, or the distal context, manifest in the lives of undocumented youth in the cultural discourses and ideologies that are taken up by persons and institutions with whom they engage with directly. Accordingly, the operations of macrosystem variables can be traced through *proximal processes* (Ayón et al., 2010), including immigrants' accounts of anti-immigrant sentiments and fears of accessing support (Suárez-Orozco et al., 2018; Suárez-Orozco et al., 2011). Drawing upon a large-scale survey of undocumented college students attending 4-year public universities in California, we examine how undocumented students' perceptions of individual, campus, and immigration policy factors are associated with their willingness to seek professional mental health services on campus. By examining individual mental health factors, the campus microsystem, and the immigration policy macrosystem together, this study uniquely recognizes how individual factors are nested in multiple contexts that may contribute to or deter mental health service use.

Individual Level Factors

Mental health help-seeking emerges from a complicated set of factors but is fundamentally anchored in an individual's psychological symptoms and recognition that symptom relief might require outside assistance. According to the Andersen Behavioral Model of Health Services Use, which has guided health services research for decades, individual level "need factors" (i.e., actual and perceived mental health needs) are key influences on one's decision to seek mental health support (Andersen, 1995). Particularly relevant to the current investigation, Yang & Hwang (2016) also identified perceived and actual need as the most proximal influences on health service use in immigrant communities, specifically. In line with this work, a recent large-scale survey of over 96,000 college students found that severity of psychological problems was the most robust predictor of students' use of low-cost or no-cost university-based mental health services (Pilar et al., 2020). Although undocumented students report multiple psychological concerns that merit professional attention, including high levels of depression, anxiety, and stress (Enriquez et al., 2021; Hagan, Lara, & Montanes, 2021; Ro et al., 2021; Suárez-Orozco & Hernández, 2020), whether greater symptom severity relates to a higher likelihood of seeking mental health support among undocumented students is unknown.

In addition, repeated status-related challenges and barriers can diminish undocumented youth's functionality, including their capacities to notice their mental health concerns and seek support to address them (Gonzales et al., 2013; Kam et al., 2018). Observing the psychological barriers to mental health help-seeking among undocumented college students, Cha et al. (2019) identified several illness cognitions that pose barriers to mental health help-seeking. These included: (a) normalizing stress as part of status-defined circumstances, (b) viewing mental health treatment as futile for addressing structural barriers, and (c) anticipating immigration-related stigma when seeking help. This research suggests that undocumented students may report

a low perceived need for services, but those who recognize a need for help may be more likely to access services. As such, effective investigation of this critical individual-level factor—mental-health need—in undocumented communities requires the disaggregation of individuals’ perceptions that they are in need of help and actual mental health symptom severity that can be quantified using validated self-report clinical measures. Notably, focusing on the case of undocumented students who have access to no-cost mental health services on campus also allows for an examination of mental health need that is not influenced by structural barriers such as eligibility for health insurance or location (Cha et al., 2019).

Micro-Level Factors

The university campus is an important microsystem for undocumented college students as it constitutes an essential social setting wherein students engage directly with others and access institutional supports (Suárez-Orozco et al., 2011). Recent scholarship has shown that perceptions of a welcoming campus climate can increase undocumented students’ mental health, which may positively impact their confidence in persisting through college (Cadenas et al., 2022). To explore the risk and protective factors impacting undocumented students in university contexts, Suarez-Orozco et al (2015) surveyed 909 students across the United States and found that they fair better in inclusive campuses where they can access safe spaces, peer networks, and supportive and informed school personnel. Others have found that a welcoming institutional environment is integral for helping undocumented students connect to peer networks (Garcia & Tierney, 2011), navigate school systems, and access on- and off-campus resources (Contreras, 2009). Conversely, negative campus climates, wherein students encounter discriminatory experiences with school personnel, can interfere with students’ sense of belonging on campus as well as their willingness to seek support (Nienhusser et al., 2016). This research strongly

suggests that campus climate might affect whether students seek out professional mental health services, specifically, but this has not been examined.

The university campus microsystem also provides a setting for students to seek practical support for status-related concerns, including legal services, academic advising, and financial assistance (Cisneros & Valdivia, 2018; Suárez-Orozco et al., 2015), all of which may help students become aware of and/or consider accessing mental health services on campus. In recent years, due in large part to the advocacy of undocumented students, many college campuses have seen growing numbers of student organizations and centers as well as undocumented student services aimed at enhancing these students' academic and professional success (Cisneros et al., 2021). Research in turn shows that, where undocumented student services are available, undocumented students report that they utilize them at high rates (Enriquez et al., 2021). However, while it is clear from a socio-ecological perspective that welcoming, “undocufriendly” campus climates and access to support services on campus can serve to alleviate undocumented students' status-related concerns (Cadenas et al., 2022; Suarez-Orozco et al., 2015), it remains unclear how undocumented student use of campus-based services relate to decisions to seek professional mental health services. In line with other studies that have investigated campus climate effects on undocumented student behavior (Cadenas et al., 2022; Suarez-Orozco et al., 2015), we rely on self-report of service use as an indicator of the campus micro climate. This choice was both practical and consistent with our theoretical framework, as proximal processes may more accurately reflect undocumented student interactions with these micro- and macro-level contexts. Perhaps due to both concerns regarding confidentiality around undocumented student identities and limited funding allocated to these resource centers once they are established (Cisneros & Valdivia, 2021), administrative data on undocumented student resource

use in California is unavailable. Moreover, the use of self-report data for undocumented students may be more accurate than service data obtained from the university even if it were available.

Macro-Level Factors

Despite growing campus supports, undocumented college students continue to report experiences of discrimination and social exclusion on campus, which discourage them from connecting with other student services providers about status-related concerns (Suárez-Orozco et al., 2015). As such, it is also critical to examine microsystem influences on campus-based mental health service use in the context of macro-level or distal factors. Recently, scholars have examined legal vulnerability as a multidimensional construct to help trace how the immigration policy context shapes psychological outcomes among undocumented college students (Velarde Pierce et al., 2021). Based on this work, we examine four dimensions of legal vulnerability—social exclusion, threat to family, discrimination and economic insecurity—as distal factors that can impact proximal processes (Brabeck, Lykes, & Hunger, 2014), specifically undocumented Latina/o/x college students' help-seeking behaviors.

Due to a policy context that over the last two decades has been marked by increased immigration enforcement and deportation activity, undocumented communities have experienced heightened fears of detection and deportation, which contribute to feelings of social exclusion as well as concerns about threats posed to family members (Capps et al., 2015; Hacker et al., 2011; Torres et al., 2018). Distinguishing between individual and family-level concerns is important as this reflects the lived reality of undocumented young adults in California who differentiate between the deportation risks faced by themselves and their parents (Enriquez & Millán, 2019). Fears of deportation and family separation and feelings of social exclusion in turn increase undocumented students' vulnerability to mental health problems (Yoshikawa et al., 2017) while

also discouraging them from connecting with others and reaching out for support (Suárez-Orozco et al., 2011). Indeed, multiple studies with undocumented immigrants have shown that fears of deportation and mistrust of service providers result in these individuals avoiding healthcare services (Castañeda & Melo, 2014; Hacker et al., 2011; Sudhinaraset et al., 2017).

In addition to policy-related social exclusion and threats to family, immigration-related discrimination and the stigma of undocumented status further exacerbate undocumented students' psychological concerns as well as their willingness to access mental health services (Cha et al., 2019). Repeated instances of discrimination can motivate negative self-appraisals and deter these students from reaching out to others for guidance and support (Contreras, 2009; Ellis & Chen, 2013). Research has also shown that status-related shame and stigma may prevent undocumented individuals from seeking mental health supports (Sudhinaraset et al., 2017). Systematic reviews of health service use in undocumented immigrant communities indicate that discrimination is a major structural barrier to access (Hacker et al., 2015).

Finally, economic insecurity is high among undocumented students as they are ineligible for federal grants and loans, and most states continue to bar their access to in-state tuition rates and state financial aid (Bjorklund Jr, 2018). Managing limited employment opportunities and insufficient financial aid is thus likely to take precedence over seeking mental health support. Even in states such as California that offer financial aid to undocumented students, many struggle economically because they are members of low-income families and often have undocumented parents who lack work authorization and must also rely on unstable, low-wage work (Valdez & Golash-Boza, 2020). Food insecurity represents a compelling indicator of the economic reality of legal vulnerability as it is driven by financial insecurity (Coleman-Jensen et al., 2017) as well as lack of access to federally-funded food programs (Caldwell et al., 2020).

Notably, Enriquez et al. (2019) found that 64% of University of California undocumented students reported food insecurity. Given the known impact of financial challenges on help-seeking in undocumented communities (Hacker et al., 2020), food insecurity—which represents a clear indicator of struggling to meet basic needs and is strongly related to poorer mental health (Pourmotabbed et al., 2020)—may be associated with lower levels of mental health help-seeking despite student access to no-cost services.

The Current Study

Among undocumented young adults, mental health constitutes both the “greatest health concern” (Siemons et al., 2017, p. 543) and the “greatest unmet health need” (Raymond-Flesch et al., 2014, p. 323). The current study examines mental health help-seeking among Latina/o/x undocumented college students attending 4-year public universities in California. A focus on California allows us to examine the help-seeking behaviors of undocumented students within relatively supportive socio-ecological environments, where these young adults have greater access to higher education, health care, in-state tuition rates, and financial aid (Ramakrishnan & Colbern, 2015) as well as university-based undocumented student services and resources (Cisneros & Valdivia, 2020; Enriquez et al., 2019). Conducting our study within a pro-integration environment can in turn help us better understand how supportive environments are associated with students' decisions to seek out mental health support. We focus on Latina/o/x undocumented students because recent scholarship suggests that undocumented young people's experiences and capacities to seek social support are racialized (Ellis et al., 2022; Enriquez, 2019).

Consistent with Yang & Hwang's (2016) theoretical framework on health service utilization in immigrant communities, we hypothesized that, at the individual level, greater

symptoms of depression and anxiety and a higher level of perceived need for mental health support would increase the likelihood of seeking campus-based mental health services. Building on Suárez-Orozco et al.'s (2011) socio-ecological framework, at the microsystem level, we examined campus climate, including both positive and negative anti-immigrant sentiment, and students' use of general campus-wide and undocumented student support services. We hypothesized that perceiving a more positive climate and using a greater number of resources would increase the likelihood of accessing mental health support on campus. Finally, at the macrosystem level, we hypothesized that more frequent experiences of immigration-related discrimination, social exclusion, threat to family, and economic insecurity would predict a lower likelihood of accessing on-campus mental health services. Taken together our work provides a contextualized understanding of mental health help-seeking among undocumented Latina/o/x students and emphasizes the need to take multiple socio-ecological factors into account when studying mental health treatment seeking among this group and potentially other marginalized groups.

Methods

This study uses survey data collected by the [redacted]. The survey was administered, in English, online from March to June 2020 with 1,277 undocumented undergraduate students attending California public universities. It includes data about educational experiences, mental health, political engagement, perceived immigration policy context, institutional context, and self and family demographics. All project activities were approved by the University [redacted] IRB.

Procedures

Participants were recruited at all nine University of California (UC) undergraduate campuses and nine of the 23 California State University (CSU) campuses; CSUs were selected

for similar geographic location. Recruitment announcements were distributed widely, including emails and social media posts from each campus' undocumented student support services office, faculty teaching large general education and ethnic studies courses, departmental and university office newsletters, and undocumented student organizations. Eligibility criteria included being over age 18, having at least one immigrant parent, and current enrollment as a CSU or UC undergraduate student. Respondents had to self-identify as being born outside of the United States and having no permanent status (e.g., no status, DACA, or a liminal status). The survey was administered via Qualtrics with an estimated completion time of 25–35 minutes.

Respondents received \$10 electronic gift card compensation.

Participants

Of the 1,277 college students that completed the survey, nearly 93% of respondents self-identified as Latina/o/x ($N = 1,181$). For the purpose of this study, the analytical sample was limited to students who identified as Latina/o/x. On average, students were 21.84 years old ($SE = .15$); and the majority of students were women (see Table 1). Most of the sample had a liminal status (DACA or TPS), reported extremely low household income, and were in their 3rd year of college or higher ($M=2.98$, $SE=.04$). Among those reporting age of arrival in the U.S., 70% arrived by the age of five ($n = 808$).

Measures

Mental Health Help-Seeking

The outcome variable was created based on students' response to the question "Have you ever sought help of any kind for your mental or emotional health?" Respondents who selected "yes" or "I don't know" were asked to indicate whether they have sought help from various types of people. For this analysis, we focused on whether they responded *yes* (1) or *no* (0) to the item:

“on-campus professional therapist.” Respondents who had indicated “no” on the first question were coded 0 and those who indicated “decline to state” were coded as missing.

Demographic Variables

Age and immigration status (*no status* = 0; *liminal status* =1) were assessed with single items. Individuals with other immigration statuses (e.g., U-visas, asylum seeker) were dropped ($n = 11$) because they experience different stressors and access to immigration relief. Gender identity was dummy coded as male, female, and nonbinary (e.g., genderqueer, nonbinary, gender-nonconforming, etc.), with female as the reference category. Participants reported hours worked per week in five-hour blocks (e.g., 1-5 hours). Based on previous research showing differential effects of full-time and part-time work on mental health service use (Pilar et al., 2020), this item was re-coded into *not working* (reference category), *working 1-20 hours*, and *working 21 hours or more*. To account for increased familiarity with campus services because of being on campus longer, year in school was coded 1-5, with 5 representing 5th year and longer. Finally, students were recruited from two university systems in California that have diverging student populations and resources (Fabricant & Brier, 2016); therefore, institutional system (CSU = 0; UC = 1) was also included as a covariate.

Individual: Mental Health Needs

Mental health symptom severity. Participants' mental health symptom severity was measured using two validated measures of depression and anxiety. Depressive symptoms were measured using the Patient Health Questionnaire - 9 (PHQ-9; Kroenke et al., 2001, $\alpha = .90$), which evaluates how much 9 different symptoms of depression have bothered them over the past 2 weeks. Responses range from *not at all* (0) to *nearly every day* (3). Scores are summed and higher scores reflect more severe depression. Anxiety was assessed using the 7-item Generalized

Anxiety Disorder Scale (GAD-7; Spitzer et al., 2006, $\alpha = .93$). Response options are identical to the PHQ-9 and were also summed, with higher scores representing more severe anxiety. In the current sample, total scores on these measures were significantly positively correlated ($r = .80, p < .001$); therefore, the scores were standardized (converted into z-scores) and averaged into a single composite of mental health symptom severity.

Perception of need. This was assessed using participants' response (*yes* = 1 or *no* = 0) to the item: “Was there ever a time during this academic year when you felt that you might need to see a professional because of problems with your mental health, emotions, or nerves?”

Microsystem: Campus Climate

Campus Attitudes Toward Undocumented Immigrants. This was assessed using two novel scales capturing positive and negative attitudes. Each scale included four items and were measured on a 4-point scale: *never* (0), *rarely* (1), *sometimes* (2), and *often* (3). Respondents were asked, “how often have you heard or witnessed the following groups express negative feelings about undocumented immigrant communities” for four groups: faculty, staff, students, members of the surrounding community ($\alpha = .82$); the same set of questions was asked about positive feelings ($\alpha = .82$). The four items on each scale were averaged, with a higher score indicative of more positive or negative attitudes towards immigrants, respectively.

Campus Resource Use. This was assessed with two sets of questions capturing 1) frequency of visiting five campus wide resources during the present academic year, including academic support services, peer tutoring, career center, identity-based center, and basic needs/food pantry; and, 2) frequency of using five undocumented student services, including visiting the undocumented student program office, speaking with professional staff, speaking with student staff, speaking with a campus partner at the office, and meeting with an immigration

lawyer or legal service provider. For both campus wide resources and undocumented student services, a variable reflecting how many of these services participants used in each category was included in the model. A higher value reflects the use of more resources.

Macrosystem: Legal Vulnerability

Immigration Policy Effects. Three subscales of the Perceived Immigration Policy Effects Scale (PIPES) were included in the analysis (Ayón, 2017)—social exclusion (5 items, $\alpha = .83$), discrimination (9 items, $\alpha = .87$), and threat to family (3 items, $\alpha = .82$). Response options included: *never* (1), *rarely* (2), *sometimes* (3), *often* (4), and *always* (5) “rarely.” Scores were averaged on each scale, with higher scores indicating greater social exclusion, discrimination, and threat to family.

Food Insecurity. Food insecurity was used as a proxy to measure economic insecurity. The 5-item U.S. Household Food Security Survey Module was used to assess food insecurity (USDA Economic Research Service, 2012). Scores ranged between 0-6 points, reflecting *high or marginal food security* (0-1), *low food security* (2 – 4), and *very low food security* (5 – 6). Per the scale scoring directions, a variable was created reflecting those with *low or very low food security* as food insecure (1) or food secure (0).

Analysis

Mplus software (Version 8.8) was used to complete the preliminary and descriptive statistics, logistic regression, and data imputation. Participants were clustered within campuses ($n = 26$), with campus-based sample sizes ranging from < 10 to > 100 . Estimation of an unconditional model predicting mental health service use produced a low intraclass correlation ($ICC = .02$). Given the negligible ICC and the small number of campuses/clusters (simulation studies show that 50 or more level-2 units are necessary; Maas & Hox, 2005), multilevel logistic

regression analyses were deemed inappropriate (Sommet & Morselli, 2017), and a traditional logistic analysis was conducted to determine what factors were associated with on-campus mental health help-seeking.

Missingness. Several independent variables were missing data. Missingness on the model variables ranged from .06-.002% ($n=66-3$); or 17% across all variables and cases. An assessment of missing data patterns revealed that students were mostly missing data on one (74%) or 2 (19%) of the variables; and 7% of the sample was missing data on 3 or more variables. We proceeded with multiple imputation. The Mplus imputation command was used to impute data for the independent variables with missing data with the exception of documentation status and gender as these are personal characteristics (Wood et al., 2021). It is also possible that students did not want to disclose if they held a liminal status. Mplus generated multiple datasets ($n=50$). “Parameter estimates are averaged over the set of analyses, and standard errors are computed using the average of the standard errors over the set of analyses and the between analysis parameter estimate variation” (Muthen & Muthen, 1998-2017, p. 444). We compared the imputed results to the results from a listwise deletion model ($N=982$), the same variables were significant across models.

Primary analysis. The Mplus Maximum Likelihood Robust (MLR) estimator, which is robust to non-normality, was used to complete the logistic regression. Using a hierarchical approach, variables were added to the model in sequential blocks. The first block consisted of the control variables (age, gender, immigration status, hours working, year in school, and university system). The second block included individual-level variables on mental health need (anxiety or depression symptomatology) and perception of need. The third block included campus level variables corresponding to the microsystem: positive and negative campus climate and use of

campus-wide and undocumented specific resources. The fourth block included variables on legal vulnerability, our proximal indicators for the immigration policy macrosystem (social exclusion, threat to family, discrimination, and food insecurity). By including the variables in sequential blocks, we were able to evaluate changes as blocks of variables were added.

Results

Descriptive Statistics

Approximately one third of the sample (31%; $n = 361$) sought help from a professional on campus during the academic year. Using the suggested cut-points on the PHQ-9 and GAD-7 to identify the proportion of students with potentially clinically significant mental health symptoms, we found that thirty percent of students met the clinical cut off range for anxiety and/or depression ($n = 350$), including 26% and 21% who reported clinically significant depressive and anxiety symptoms, respectively. Seventy-three percent of students reported that they perceived that they needed help for emotional problems ($n = 810$). On average, students reported sometimes experiencing a positive campus climate toward undocumented immigrants ($M = 1.95, SE = .02$) and rarely experiencing a negative campus climate toward undocumented immigrants ($M = .70, SE = .02$). Most students reported using two to three campus wide resources ($M = 2.44, SE = .04$). Similarly, on average students reported using two to three undocumented student services ($M = 2.67, SE = .06$). On average, students reported rarely experiencing discrimination ($M = 2.18, SE = .03$), sometimes experiencing social exclusion ($M = 2.92, SE = .03$), and often experiencing threat to their family due to the immigration policy climate ($M = 4.11, SE = .04$). Food insecurity was prevalent among the sample (59%, $n = 687$). Correlations for study variables are shown in Table 2.

Primary Analysis

The hierarchical regression analysis identified several factors associated with undocumented students seeking professional mental health services on campus (see Table 3). Model one included the control variables. Students with DACA/TPS were less likely to use mental health services on campus compared to those with no immigration status ($OR = .72$). Students who worked 20 hours or less (i.e., part-time) were more likely to use mental health services compared to those who reported not working ($OR = 1.56$). Students who had attended college longer were more likely to use mental health services ($OR = 1.43$). Students who attended the UC system were more likely to use mental health services than students from the CSU system ($OR = 1.91$).

Model two included individuals' experiences and perceptions of mental health need variables. In this model, part-time work ($OR = 1.55$), year in school ($OR = 1.44$), and university system ($OR = 1.81$) remained significant. Our hypothesis was supported as both mental health need indicators were statistically significant. Greater severity of mental health symptoms ($OR = 1.27$) and higher perceived need ($OR = 2.87$) was associated with a greater likelihood of using on-campus mental health services.

Model three reflects the addition of the microsystem factors: campus climate and resource use. Part-time work ($OR = 1.39$), year in school ($OR = 1.42$), and university system ($OR = 1.74$) remained significant. Level of mental health symptomatology ($OR = 1.28$) and perceived mental health need ($OR = 2.83$) also remained significant in the same direction. Our hypothesis was partially supported: only access to resources was a significant predictor of mental health service use. Participants who used more campus wide services ($OR = 1.21$) and undocumented student services ($OR = 1.18$), were more likely to seek out campus-based mental health services.

Model four included the addition of legal vulnerability variables, which were proximal indicators for the immigration policy macrosystem. In model 4, immigration status ($OR = .71$) was significant; part-time work ($OR = 1.41$), year in school ($OR = 1.41$), and university system ($OR = 1.72$) remained significant in the same direction. Levels of mental health symptoms ($OR = 1.38$) and perceived mental health need ($OR = 2.82$) remained significant in the same direction. Use of campus wide resources ($OR = 1.21$) and undocumented student services ($OR = 1.18$) remained significant in the same direction. We found partial support for the hypothesis regarding the influence of indicators of the macrosystem. Only the social exclusion indicator was statistically significant: students who reported higher levels of social exclusion were significantly less likely to seek mental health services on campus ($OR = .79$).

Discussion

Despite elevated levels of anxiety, depression, and general stress among undocumented students (Enriquez et al., 2018; Ro et al., 2021; Suárez-Orozco & Hernández, 2020), research suggests that undocumented students may be less likely to access mental health services than their citizen peers (Cha et al., 2019). However, there has been little empirical attention to contextual factors that might facilitate or impede mental health help-seeking. The few investigations that have been conducted focused on individual mental health (Andersen, 1995; Pilar et al., 2020) and individualized structural barriers (e.g., language, cost, transportation; Derr, 2016). Informed by a socio-ecological framework (Suárez-Orozco et al., 2011) and health service utilization theories specific to the immigrant experience (Yang & Hwang, 2016), this study addressed this major gap in the literature by examining theoretically-driven multi-level influences on help-seeking in an underserved and high-need population: undocumented Latina/o/x college students.

To our knowledge, this is the first large-scale investigation of individual, campus, and immigration policy context factors as predictors of mental health help-seeking in this population. Notably, we found that despite a high level of perceived need, only one third of undocumented students sought on-campus mental health services during the present academic year. In line with Suárez-Orozco et al.'s (2011) socio-ecological framework, factors at the individual, micro and macro-levels were associated with mental health help-seeking. Specifically, objective and subjective indicators of individual mental health were strongly associated with service use, with perceived need having the strongest effects of all the predictors. In addition, at the micro-level, greater use of campus-wide and undocumented student specific services was associated with a higher probability of mental health help-seeking. Finally, at the macro-level, we found that lower levels of social exclusion predicted a greater likelihood of on-campus mental health service use. These findings demonstrate the importance of taking ecological contexts into account when considering mental health service use, particularly in the case of undocumented immigrants and likely other structurally marginalized groups.

Individual-Level: Objective and Subjective Indicators of Need

Many studies have found that severity of psychological stress is a strong predictor of mental health service use among college students (Pilar et al., 2020), but few of these studies assessed perceived need, and limited research has been conducted with undocumented or ethnic minority young adults specifically. A notable proportion of undocumented students—approximately one third—reported clinically significant levels of anxiety or depression, and approximately 3 out of every 4 students reported that they felt the need to see a professional for mental health during the present academic year. With every one standard deviation unit increase in mental health symptoms, students were 1.3 times more likely to use mental health services,

and those who perceived a need for help were almost 3 times as likely to seek professional help. These results are consistent with a recent qualitative study that found that the normalization of immigration related stressors and mental health strain poses a barrier to undocumented college students mental health help-seeking (Cha et al., 2019); it is likely that students who de-normalize these strains recognize their need and seek services. While mental health stigma may be prevalent among immigrant communities (De Silva et al., 2020; Menendez et al., 2020), our findings suggest that it does not deter undocumented students from recognizing that they have mental health needs or from utilizing mental health services.

Microsystem: Pro-immigrant Campus Climate and Resource Use

Greater use of other campus-wide resources (e.g., academic support services, identity-based center, basic needs center) and use of undocumented student services increased the likelihood of mental health help-seeking. Specifically, each additional campus-wide or undocumented student resource used was associated with an approximately 20% higher likelihood of accessing on-campus mental health services. These results may reflect the importance of having a positive attitude toward seeking formal support in general, as has been found in other studies of mental health service use among young people (Gulliver et al., 2010). It is also possible that students who access general student services on campus may have a greater *capacity* to seek help for their concerns overall, more extensive social networks, and/or more awareness of university services that could benefit them (e.g., Sarabia et al., 2021). Further, undocumented student services foster feelings of belonging and safety among undocumented students (Cisneros & Valdivia, 2020; Enriquez et al., 2019), possibly facilitating their comfort with accessing on-campus mental health services and/or supporting their attempts to acquire services. Future research should explore the mechanisms underlying the strong positive

association between use of both campus-wide and undocumented student resources and mental health services.

Both positive and negative campus climate toward undocumented immigrants were not associated with on-campus mental health service use. This may be a product of the overall positive campus climate reported, and thus relatively limited variability. Notably, on average, students rarely experienced anti-immigrant sentiment from faculty, staff, or students ($M = .70$, $SE = .02$) and reported being exposed to pro-immigrant sentiments on campus at least sometimes ($M = 1.95$, $SE = .02$). Before concluding that attitudes toward immigrants on campus do not play an important role in service use, it would be important for future research to focus on communities where exposure to anti-immigrant sentiment varies more.

Macrosystem: Indicators of Legal Vulnerability and the Immigration Policy Context

Research has shown that immigration status-related structural barriers have an adverse impact on undocumented immigrants' everyday lives (Dreby, 2015; Enriquez et al., 2018; Gonzales, 2016), including their mental health (Suárez-Orozco & Hernández, 2020; Velarde Pierce et al., 2021). The current study found that perceived social exclusion due to the immigration policy context was the primary mechanism by which the immigration policy context served as a barrier to on-campus mental health help-seeking. In our study, social exclusion was captured by feeling unsafe when leaving home, fearing detention or deportation, avoiding certain public spaces, and feeling like one had no rights. Specifically, each one-unit increase on the social exclusion subscale was associated with a 25% lower likelihood of accessing on-campus mental health services. It stands to reason that individuals who perceive higher social exclusion are less likely to engage with social institutions, such as mental health services. These findings align with prior research that suggests that fear of deportation and concerns about social stigma

create barriers to healthcare access (Hacker et al., 2011; Sudhinaraset et al., 2017) and mental health service use (Cha et al., 2019; Shore & Ayón, 2018) because institutional interactions raise concerns of discovery. The current study extends this work by highlighting how social exclusion created by federal and state policy manifests in the lives of undocumented students—namely, by impacting their mental health help-seeking. It is important to note that while this is an important explanatory variable, participants perceived social exclusion was not high ($M = 2.92$, $SE = .03$), suggesting that, on average, they “sometimes” experienced social exclusion, likely due to the fact that they reside in California, a relatively inclusionary state context.

Notably, the three other immigration policy variables—discrimination, threat to family, and food insecurity—were not associated with mental health service use. First, discrimination due to immigration policy context may lack predictive power because participants reported rarely experiencing discrimination. Furthermore, even in instances where discrimination was experienced, it is possible that students normalize these experiences (Cha et al., 2019) or do not perceive them to be relevant to on-campus mental health intervention. Second, perceived threat to family, reflecting concerns about family members’ deportation and family separation, was not significant. Because undocumented students are accessing on-campus mental health services on their own, it is possible that they do not perceive this action as posing significant risk to their family members who are not engaging with these services. This finding points to the importance of distinguishing between individual versus family level threats. Third, food insecurity, which is a proxy for economic insecurity, may not be associated with use of services because all participants have access to free or low-cost on-campus mental health services as part of their student fees. Outside of a university context, this form of legal vulnerability may still present a barrier to service use.

Other Factors: Institutional Context and Demographic Characteristics

Sociodemographic and related characteristics were included as covariates in the analyses. Importantly, students who reported having a liminal status (i.e., DACA or TPS) were 30% less likely to use on-campus mental health services compared to those with no immigration status. Second, the institutional system played a role: students in the UC system were 1.7 times more likely to seek out mental health services than those in the CSU system. This difference might reflect the disparity in resources across the two university systems. The UC system offers all students access to university health insurance, which would facilitate their access to care, and has a significantly better counselor-to-student ratio compared to the CSU system (California Faculty Association, 2017).

Limitations and Future Research

It is important to note that the present study had some limitations and constraints on generality. First, the correlational study design precludes causal explanations. Second, students participated on a voluntary basis, which could have led to selection bias. To avoid this bias, we used multiple, wide-reaching recruitment strategies. Still, because recruitment was conducted through university channels, it is possible that undocumented students who were less connected to university life were less likely to participate. Moreover, undocumented students who were more fearful of the consequences of status disclosure may have been less likely to participate in the study, leading to an exclusion of the most vulnerable. Third, respondents were Latina/o/x and primarily female, so findings may not generalize to undocumented populations of other racial and ethnic backgrounds and other gender identities. Fourth, the current study focused solely on mental health service use during the present academic year; as such, our measure of service use did not capture the extent to which participants engaged in treatment over time.

Future research should examine predictors of treatment retention among undocumented students to ascertain whether social exclusion and other relevant factors interfere with ongoing engagement in services. Relatedly, the measures of mental health were limited to depression and anxiety, without consideration of other forms of clinical concerns.

Fifth, although we took an ecological approach to examining predictors of mental health service use, several critical factors were not included, including but not limited to the number of years students had been living in the United States, levels of acculturation stress, and other macro-level indicators in addition to the immigration policy context. Future studies should consider additional data beyond self-reports that assess the quality and satisfaction with services on campus (both health and non-health); and administrative service outcome data. Relatedly, we used a multidimensional approach to capture indicators of the macrosystem surrounding the immigration policy context, thereby advancing previous research focused on a single dimension. Importantly, however, a reliance on self-reported data to measure policy-related legal vulnerability has notable limitations. Researchers continue to identify new ways by which the immigration policy context manifests in the lives of undocumented immigrants. The current study considered participants' experience of how immigration policy is manifested in their lives, and it is possible that participants may under-report the impact of policies. There may be additional dimensions of legal vulnerability that we are not capturing. In accordance with Yang and Hwang's (2016) recommendation for the inclusion of immigration-specific factors in health service utilization research, measures of mental health need that address the experiences of the undocumented population, such as assessments of trauma in the pre, during, and post migration phases, are needed to further strengthen our understanding of the link between mental health need and service use.

Finally, the onset of the COVID-19 pandemic overlapped with data collection. Our respondents were instructed to report on pre-pandemic experiences and feelings; however, this may have introduced recall bias. Alternatively, they may have overestimated their mental health needs as Latina/o/x college students experienced severe mental health strain during the pandemic and undocumented students and mixed-status families faced unique pandemic stressors due to their legal vulnerability (Enriquez et al., 2022). Thus, the context of data collection may pose an additional constraint on generality.

Implications

The current findings suggest at least three concrete ways to increase the likelihood that undocumented Latina/o/x students who perceive a need for mental health support will actually access these services on campus: 1) raise awareness regarding mental health symptoms and combatting the “normalization” of distress in the undocumented community; 2) cultivate a resource-rich campus environment where staff empower students to access multiple campus resources; and 3) recognize undocumented immigrants’ social exclusion outside of the campus context and offer reassurance that on-campus mental health services are inclusive, welcoming, and safe. Acknowledgement by mental health professionals of the systemic inequalities and marginalization of undocumented young adults and openness to exploring how those factors might impinge on mental health would likely facilitate greater use of mental health services. Taken together, the current findings suggest that fostering an institutional culture of awareness and inclusion around both mental health and immigration policy can have positive effects on undocumented immigrant students’ mental health help-seeking behavior.

References

- Andersen, R. M. (1995). Revisiting the behavioral model and access to medical care: does it matter? *Journal of Health and Social Behavior*, 1-10. <https://doi.org/10.2307/2137284>
- Ayón, C. (2017). Perceived immigration policy effects scale: Development and validation of a scale on the impact of state-level immigration policies on Latino immigrant families. *Hispanic Journal of Behavioral Sciences*, 39(1), 19-33. <https://doi.org/10.1177/0739986316681102>
- Ayón, C., Marsiglia, F. F., & Bermudez-Parsai, M. (2010). Latino family mental health: Exploring the role of discrimination and familismo. *Journal of Community Psychology*, 38(6), 742-756. <https://doi.org/10.1002/jcop.20392>
- Bjorklund Jr, P. (2018). Undocumented students in higher education: A review of the literature, 2001 to 2016. *Review of Educational Research*, 88(5), 631-670. <https://doi.org/10.3102/0034654318783018>
- Brabeck, K.M., Lykes, M.B., & Hunter, C. (2014). The Psychosocial Impact of Detention and Deportation on U.S. Migrant Children and Families. *American Journal of Orthopsychiatry*, 84(5), 496-505.
- California Faculty Association. (2017). *Counseling in the CSU: A Risky Underinvestment*. Retrieved from https://calfac.org/sites/default/files/file-attachments/counseling_in_the_csu_2017_1500ratio.pdf
- Capps, R., Koball, H., Campetella, A., Perreira, K., Hooker, S., & Pedroza, J. M. (2015). Implications of immigration enforcement activities for the well-being of children in immigrant families. *Washington, DC: Urban Institute and Migration Policy Institute*.

- Cadenas, G. A., & Nienhusser, H. K. (2021). Immigration status and college students' psychosocial well-being. *Educational Researcher*, 50(3), 197-200.
<https://doi.org/10.1037/cdp0000564>
- Caldwell, J. I., Shah-Patel, D., Cohen, D. A., Palimaru, A. I., & Kuo, T. (2020). Food insecurity, participating in the Supplemental Nutrition Assistance Program, and the degree to which patients anticipate help from clinics to find food in Los Angeles County. *Preventive Medicine*, 141, 106297. <https://doi.org/10.1016/j.ypmed.2020.106297>
- Castañeda, H., & Melo, M. A. (2014). Health care access for Latino mixed-status families: Barriers, strategies, and implications for reform. *American Behavioral Scientist*, 58(14), 1891-1909. <https://doi.org/https://doi.org/10.1177%2F0002764214550290>
- Cha, B. S., Enriquez, L. E., & Ro, A. (2019). Beyond access: Psychosocial barriers to undocumented students' use of mental health services. *Social Science & Medicine*, 233, 193-200. <https://doi.org/10.1016/j.socscimed.2019.06.003>
- Choi, K.-H., Buskey, W., & Johnson, B. (2010). Evaluation of counseling outcomes at a university counseling center: The impact of clinically significant change on problem resolution and academic functioning. *Journal of Counseling Psychology*, 57(3), 297. <https://doi.org/10.1037/a0020029>
- Cisneros, J., & Valdivia, D. (2018). Undocumented student resource centers: Institutional supports for undocumented students. *Penn Center for Minority Serving Institutions*. Retrieved from <https://cmsi.gse.upenn.edu/sites/default/files/USRCs.pdf>.
- Cisneros, J., & Valdivia, D. (2020). "We Are Legit Now": Establishing undocumented student resource centers on campus. *Journal of College Student Development*, 61(1), 51-66. <https://doi.org/10.1353/csd.2020.0003>

- Cisneros, J., Valdivia, D., Reyna Rivarola, A. R., & Russell, F. (2021). "I'm here to fight along with you": Undocumented student resource centers creating possibilities. *Journal of Diversity in Higher Education*.
- Coleman-Jensen, A., Rabbitt, M., Gregory, C., & Singh, A. (2017). Household Food Security in the United States in 2016. USDA Economic Research Service Economic Research Report Number 237.
- Contreras, F. (2009). Sin papeles y rompiendo barreras: Latino students and the challenges of persisting in college. *Harvard Educational Review*, 79(4), 610-632.
<https://doi.org/https://doi.org/10.17763/haer.79.4.02671846902g133w>
- De Silva, L. E. D., Ponting, C., Ramos, G., Guevara, M. V. C., & Chavira, D. A. (2020). Urban Latinx parents' attitudes towards mental health: Mental health literacy and service use. *Children and Youth Services Review*, 109, 104719.
<https://doi.org/https://doi.org/10.1016/j.childyouth.2019.104719>
- Derr, A. S. (2016). Mental health service use among immigrants in the United States: A systematic review. *Psychiatric Services*, 67(3), 265-274.
<https://doi.org/10.1176/appi.ps.201500004>
- Dreby, J. (2015). *Everyday illegal: When policies undermine immigrant families*. University of California Press.
- Ellis, B. D., Offidani-Bertrand, C., & Ferrera, M. J. (2022). "No way! Like only Hispanics are illegal": Examining the racialized psychosocial development of migrant "illegality" across immigrant groups in the United States. *Journal of Adolescent Research*,
<https://doi.org/10.1177/07435584211064195>

- Ellis, L. M., & Chen, E. C. (2013). Negotiating identity development among undocumented immigrant college students: A grounded theory study. *Journal of Counseling Psychology, 60*(2), 251. <https://doi.org/10.1037/a0031350>
- Enriquez, L. E. (2019). Border-hopping Mexicans, law-abiding Asians, and racialized illegality: Analyzing undocumented college students experiences through a relational lens. *Relational Formations of Race: Theory, Method and Practice, 257-277*.
- Enriquez, L. E., Burciaga, E. M., Cardenas, T., Cha, B., Delgado, V., Lopez, M. G., Millán, D., Mireles, M., Hernandez, M. M., & Ramirez, E. (2019). How can universities foster educational equity for undocumented college students: Lessons from the University of California. UCLA: Institute for Research on Labor and Employment. Retrieved from <https://escholarship.org/uc/item/031649nf>
- Enriquez, L. E., Chavarria, K., Rodriguez, V. E., Ayón, C., Ellis, B. D., Hagan, M. J., Jefferies, J., Lara, J., Morales Hernandez, M., Murillo, E. G., Nájera, J. R., Offidani-Bertrand, C., Oropeza Fujimoto, M., Ro, A., Rosales, W. E., Sarabia, H., Soltero López, A. K., Valadez, M., Valdez, Z., & Velarde Pierce, S. (2021). Toward a nuanced and contextualized understanding of undocumented college students: Lessons from a California Survey. *Journal of Latinos and Education, 20*(3), 215-231. <https://doi.org/10.1080/15348431.2021.1952076>
- Enriquez, L. E., Hernandez, M. M., & Ro, A. (2018). Deconstructing immigrant illegality: A mixed-methods investigation of stress and health among undocumented college students. *Race and Social Problems, 10*(3), 193-208.

- Enriquez, L. E., & Millán, D. (2019). Situational triggers and protective locations: Conceptualising the salience of deportability in everyday life. *Journal of Ethnic and Migration Studies*, 1-20. <https://doi.org/10.1080/1369183X.2019.1694877>
- Enriquez, L. E., Morales, A. E., Rodriguez, V. E., Chavarria, K., & Ro, A. (2022). Mental health and COVID-19 pandemic stressors among Latina/o/x college students with varying self and parental immigration status. *Journal of Racial and Ethnic Health Disparities*, 1-14.
- Fabricant, M., & Brier, S. (2016). *Austerity blues: Fighting for the soul of public higher education*. John Hopkins University Press.
- Feldblum, M., Hubbard, S., Lim, A., Penichet-Paul, C., & Siegel, H. (2020). *Undocumented students in higher education*. Presidents' Alliance on Higher Education and Immigration. Retrieved from: <https://www.presidentsalliance.org/report-undocumented-students-in-higher-education-how-many-students-are-in-u-s-colleges-and-universities-and-who-are-they/>
- Garcia, L. D., & Tierney, W. G. (2011). Undocumented immigrants in higher education: A preliminary analysis. *Teachers College Record*, 113(12), 2739-2776.
- Gonzales, R. G. (2016). *Lives in limbo: Undocumented and coming of age in America*. University of California Press.
- Gonzales, R. G., Suárez-Orozco, C., & Dedios-Sanguinetti, M. C. (2013). No place to belong: Contextualizing concepts of mental health among undocumented immigrant youth in the United States. *American Behavioral Scientist*, 57(8), 1174-1199. <https://doi.org/10.1177/0002764213487349>

- Gulliver, A., Griffiths, K. M., & Christensen, H. (2010). Perceived barriers and facilitators to mental health help-seeking in young people: A systematic review. *BMC Psychiatry*, *10*(1), 1-9. <https://doi.org/10.1186/1471-244X-10-113>
- Hacker, K., Anies, M., Folb, B. L., & Zallman, L. (2015). Barriers to health care for undocumented immigrants: a literature review. *Risk management and healthcare policy*, *8*, 175. <https://doi.org/10.2147/RMHP.S70173>
- Hacker, K., Chu, J., Leung, C., Marra, R., Pirie, A., Brahim, M., English, M., Beckmann, J., Acevedo-Garcia, D., & Marlin, R. P. (2011). The impact of immigration and customs enforcement on immigrant health: Perceptions of immigrants in Everett, Massachusetts, USA. *Social Science & Medicine*, *73*(4), 586-594.
<https://doi.org/https://doi.org/10.1016/j.socscimed.2011.06.007>
- Hagan, M., Lara, J., & Montanes, M. C. (2021). Childhood adversity, socioemotional functioning and generalized anxiety in young adults from mixed immigration status families. *Child Abuse & Neglect*, *118*, Article 105128.
<https://doi.org/10.1016/j.chiabu.2021.105128>
- Kam, J. A., Pérez Torres, D., & Steuber Fazio, K. (2018). Identifying individual- and family-level coping strategies as sources of resilience and thriving for undocumented youth of Mexican origin. *Journal of Applied Communication Research*, *46*(5), 641-664.
<https://doi.org/10.1080/00909882.2018.1528373>
- Kim, J.E., Park, S.S., La, A., Chang, J., & Zane, N. (2016). Counseling services for Asian, Latino/a, and White American students: Initial severity, session attendance, and outcome. *Cultur Divers Ethnic Minor Psychol*, *22*(3):299-310. doi: 10.1037/cdp0000069.

- Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine, 16*(9), 606-613.
<https://doi.org/10.1046/j.1525-1497.2001.016009606.x>
- Maas, C. J., & Hox, J. J. (2005). Sufficient sample sizes formultilevel modeling. *Methodology, 1*, 86–92. DOI:<https://doi.org/10.1027/1614-2241.1.3.86>
- Menendez, J., Franco, M., Davari, J., Gnilka, P. B., & Ashby, J. S. (2020). Barriers and facilitators to Latinx college students seeking counseling. *Journal of College Student Psychotherapy, 34*(4), 302-315. <https://doi.org/10.1080/87568225.2019.1600093>
- Minami, T., Davies, D. R., Tierney, S. C., Bettmann, J. E., McAward, S. M., Averill, L. A., Huebner, L. A., Weitzman, L. M., Benbrook, A. R., & Serlin, R. C. (2009). Preliminary evidence on the effectiveness of psychological treatments delivered at a university counseling center. *Journal of Counseling Psychology, 56*(2), 309.
<https://doi.org/10.1037/a0015398>
- Nienhusser, H. K., Vega, B. E., & Saavedra Carquin, M. C. (2016). Undocumented students' experiences with microaggressions during their college choice process. *Teachers College Record, 118*, 1-33. <http://hdl.handle.net/10919/96141>
- Oswalt, S. B., Lederer, A. M., Chestnut-Steich, K., Day, C., Halbritter, A., & Ortiz, D. (2020). Trends in college students' mental health diagnoses and utilization of services, 2009–2015. *Journal of American College Health, 68*(1), 41-51.
<https://doi.org/10.1080/07448481.2018.1515748>
- Pérez, W., Cortés, R. D., Ramos, K., & Coronado, H. (2010). “Cursed and blessed”: Examining the socioemotional and academic experiences of undocumented Latina and Latino college students. *New Directions for Student Services, 2010*(131), 35-51.

- Pilar, M. R., Cunningham-Williams, R. M., & Williams Woodson, S.-L. L. (2020). Does the Andersen behavioral model of health services use predict college students' use of on-campus mental health services? *Journal of American College Health*, 68(6), 631-643. <https://doi.org/10.1080/07448481.2019.1583665>
- Potochnick, S. R., & Perreira, K. M. (2010). Depression and anxiety among first-generation immigrant Latino youth: Key correlates and implications for future research. *The Journal of Nervous and Mental Disease*, 198(7), 470. <https://doi.org/10.1097/NMD.0b013e3181e4ce24>
- Ramakrishnan, K., & Colbern, A. (2015). *The "California package" of immigrant integration and the evolving nature of state citizenship*. UCLA: Institute for Research on Labor and Employment. Retrieved from: <https://escholarship.org/uc/item/99w6b4kd>
- Raymond-Flesch, M., Siemons, R., Pourat, N., Jacobs, K., & Brindis, C. D. (2014). "There is no help out there and if there is, it's really hard to find": A qualitative study of the health concerns and health care access of Latino "DREAMers". *Journal of Adolescent Health*, 55(3), 323-328.
- Ro, A., Nakphong, M. K., Choi, H. Y., Nguyen, A., & Sudhinaraset, M. (2021). The association between social ties and depression among Asian and Pacific Islander undocumented young adults. *BMC public health*, 21(1), 1-10.
- Pourmotabbed, A., Moradi, S., Babaei, A., Ghavami, A., Mohammadi, H., Jalili, C., Symonds, M. E., & Miraghajani, M. (2020). Food insecurity and mental health: a systematic review and meta-analysis. *Public health nutrition*, 23(10), 1778-1790. <https://doi.org/10.1017/S136898001900435X>

- Sarabia, H., Enriquez, L. E., Rodriguez, V. E., Zaragoza, L., & Tinoco, S. (2021). What helps students get help?: An exploratory analysis of factors that shape undocumented college students' use of academic support services. *Journal of Latinos and Education, 20*(3), 290-303.
- Shore, K., & Ayón, C. (2018). Emerging health needs of immigrant families in California: Perspectives from health care providers. *California Program on Access to Care, University of California*.
https://cpac.berkeley.edu/sites/default/files/cpac_immigrant_health_brief_final_071018.pdf
- Siemons, R., Raymond-Flesh, M., Auerswald, C. L., & Brindis, C. D. (2017). Coming of age on the margins: Mental health and wellbeing among Latino immigrant young adults eligible for Deferred Action for Childhood Arrivals (DACA). *Journal of Immigrant and Minority Health, 19*(3), 543-551.
- Snell, M. N., Mallinckrodt, B., Hill, R. D., & Lambert, M. J. (2001). Predicting counseling center clients' response to counseling: A 1-year follow-up. *Journal of Counseling Psychology, 48*(4), 463. <https://doi.org/10.1037/0022-0167.48.4.463>
- Sommet, N. and Morselli, D. (2017). Keep Calm and Learn Multilevel Logistic Modeling: A Simplified Three-Step Procedure Using Stata, R, Mplus, and SPSS. *International Review of Social Psychology, 30*(1), 203–218, DOI: <https://doi.org/10.5334/irsp.90>
- Spitzer, R. L., Kroenke, K., Williams, J. B., & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder: the GAD-7. *Archives of Internal Medicine, 166*(10), 1092-1097. <https://doi.org/10.1001/archinte.166.10.1092>

- Suárez-Orozco, C., & Hernández, G. L. (2020). "Waking up every day with the worry": A mixed-methods study of anxiety in undocumented Latinx college students. *Frontiers in Psychiatry, 11*. <https://doi.org/10.3389/fpsyt.2020.568167>
- Suárez-Orozco, C., Katsiaficas, D., Birchall, O., Alcantar, C. M., Hernandez, E., Garcia, Y., Michikyan, M., Cerda, J., & Teranishi, R. T. (2015). Undocumented undergraduates on college campuses: Understanding their challenges and assets and what it takes to make an undocufriendly campus. *Harvard Educational Review, 85*(3), 427-463. <https://doi.org/https://doi.org/10.17763/0017-8055.85.3.427>
- Suárez-Orozco, C., Motti-Stefanidi, F., Marks, A., & Katsiaficas, D. (2018). An integrative risk and resilience model for understanding the adaptation of immigrant-origin children and youth. *American Psychologist, 73*(6), 781-796. <https://doi.org/10.1037/amp0000265>
- Suárez-Orozco, C., Yoshikawa, H., Teranishi, R., & Suárez-Orozco, M. (2011). Growing up in the shadows: The developmental implications of unauthorized status. *Harvard Educational Review, 81*(3), 438-473. <https://doi.org/10.17763/haer.81.3.g23x203763783m75>
- Sudhinaraset, M., Ling, I., To, T. M., Melo, J., & Quach, T. (2017). Dreams deferred: Contextualizing the health and psychosocial needs of undocumented Asian and Pacific Islander young adults in Northern California. *Social Science & Medicine, 184*, 144-152. <https://doi.org/10.1016/j.socscimed.2017.05.024>
- Torres, S. A., Santiago, C. D., Walts, K. K., & Richards, M. H. (2018). Immigration policy, practices, and procedures: The impact on the mental health of Mexican and Central American youth and families. *American Psychologist, 73*(7), 843. <https://doi.org/10.1037/amp0000184>

- Turner, A. L., & Berry, T. R. (2000). Counseling center contributions to student retention and graduation: A longitudinal assessment. *Journal of College Student Development, 41*(6), 627-636.
- USDA Economic Research Service. (2012). U.S. Household Food Security Survey Module: Six-Item Short Form. U.S. Department of Agriculture.
- Valdez, Z., & Golash-Boza, T. (2020). Master status or intersectional identity? Undocumented students' sense of belonging on a college campus. *Identities, 27*(4), 481-499.
<https://doi.org/10.1080/1070289X.2018.1534452>
- Velarde Pierce, S., Haro, A. Y., Ayón, C., & Enriquez, L. E. (2021). Evaluating the effect of legal vulnerabilities and social support on the mental health of undocumented college students. *Journal of Latinos and Education, 20*(3), 246-259.
- Woods, A. D., Davis-Kean, P., Halvorson, M., King, K. M., Logan, J. R., Xu, M., ... & Vasilev, M. (2021). Missing Data and Multiple Imputation Decision Tree. PsyArXiv.
<https://doi.org/10.31234/osf.io/mdw5r>
- Yoshikawa, H., Suárez-Orozco, C., & Gonzales, R. G. (2017). Unauthorized status and youth development in the US. *Journal of Research on Adolescence, 27*(1), 4-19.
<https://doi.org/10.1111/jora.12272>

Table 1*Demographic Characteristics of Participants*

	<i>n</i>	<i>%</i>
Gender		
Male	267	22.6
Female	890	75.3
Nonbinary	21	1.8
Missing	3	.03
Income		
\$0-10,000	87	7.4
\$10,001-20,000	176	14.9
\$20,001-30,000	259	21.9
\$30,001-40,000	208	17.6
\$40,001 and more	385	32.6
Missing	66	5.6
Immigration Status		
Liminal status (DACA/TPS)	893	75.6
No status	277	23.5
Missing	11	.9
Year in School		
1 st - 2 nd year	365	30.9
3 rd year or higher	809	68.5
Missing	7	.6
Institution		
UC system	589	49.9
CSU system	592	50.1

Note. $N = 1181$. Participants were on average 21.84 years old ($SE = .15$).

Table 2

Correlations for Study Variables

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
1. Sought help on campus	--																			
2. Age	.10**	--																		
3. Men	-.11*	.08*	--																	
4. Nonbinary	.22**	.05	-.43	--																
5. Liminal Status *DACA/TPS)	-.01	.20**	-.04	-.22*	--															
6. Work hours 1-20 hours	.19**	-.05	-.14*	-.03	.30**	--														
7. Work hours 21 & more	-.04	.29**	-.01	.06	.27**	-.88**	--													
8. Year in School	.24**	.53**	.00	.05	.35**	.10	.25**	--												
9. UC System	.24**	-.27**	.00	.28**	-.12**	.23**	-.39**	-.09**	--											
10. PhQ/GAD	.23**	-.05	-.12**	.26**	-.06	.02	-.04	-.03	.07*	--										
11. Perceived MH need	.44**	.04	-.36**	.43**	.02	.09	.06	.09**	.13**	.65**	--									
12. Positive campus climate	.06	.00	.00	-.01	.10	.03	.04	.02	-.17**	-.06**	-.04	--								
13. Negative campus climate	.18**	.01	-.07	.24**	-.01	.05	.01	.12**	.19**	.26**	.25**	-.08	--							
14. Campus wide resources	.25**	-.05	-.05	.12	-.08	.14**	-.14**	-.01	.14**	.02	.04	.12**	.19**	--						
15. Undocumented student services	.28**	.04	.03	-.05	.05	.13**	-.03	.07**	.10**	.05	.10**	.08**	.14**	.38**	--					
16. Discrimination	.12**	.08**														--				
17. Social exclusion	.04	-.04															--			
18. Threat to family	.05	-.03																--		
19. Food insecure	.19**	-.02																	--	
			-.28**	.14	.02	.08*	.03	-.01	.05	.35**	.29**	-.02	.19**	.07**	.09**	.39**	.62**			
			-.02	.08	-.16**	.10**	-.09	-.00	.08	.32**	.24**	-.06	.25**	.19**	.13**	.39**	.33**	.16**		

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

Table 3

Factors Associated with Seeking Mental Health Services Among Latina/o/x Undocumented Students

Predictors	Model 1 (Control)		Model 2 (Individual level)		Model 3 (Microsystem level)		Model 4 (Macrosystem level)	
	<i>B</i> (<i>SE</i>)	<i>OR</i> [95% <i>CI</i>]	<i>B</i> (<i>SE</i>)	<i>OR</i> [95% <i>CI</i>]	<i>B</i> (<i>SE</i>)	<i>OR</i> [95% <i>CI</i>]	<i>B</i> (<i>SE</i>)	<i>OR</i> [95% <i>CI</i>]
Age	.01(.02)	1.02 [.97, 1.06]	.01(.02)	1.01 [.97, 1.06]	.01(.02)	1.01 [.97, 1.06]	.01(.02)	1.01 [.97, 1.06]
Gender ^a								
Male	-.27(.16)	.76 [.55, 1.05]	-.00(.17)	1.00 [.72, 1.39]	-.05(.18)	.96 [.68, 1.35]	-.13(.18)	.88 [.62, 1.25]
Nonbinary	.62(.46)	1.85 [.75, 4.60]	.35(.50)	1.41 [.54, 3.74]	.33(.53)	1.39 [.50, 3.90]	.34(.53)	1.41 [.50, 3.95]
Liminal status (DACA/TPS)	-.33(.17)*	.72 [.52, 1.00]	-.31(.17)	.73 [.52, 1.03]	-.32(.18)	.73 [.51, 1.03]	-.34(.18)*	.71 [.50, 1.01]
Work hours ^b								
1-20 hrs/wk	.45(.16)**	1.56 [1.15, 2.13]	.44(.16)**	1.55 [1.13, 2.13]	.33(.17)*	1.39 [1.00, 1.93]	.34(.17)*	1.41 [1.02, 1.96]
21+ hrs/wk	.10(.18)	1.11 [.78, 1.58]	.06(.19)	1.06 [.74, 1.53]	.06(.19)	1.06 [.73, 1.55]	.10(.20)	1.10 [.75, 1.61]
Year in School	.36(.07)***	1.43 [1.25, 1.64]	.37(.07)***	1.44 [1.25, 1.66]	.35(.08)***	1.42 [1.23, 1.65]	.34(.08)***	1.41 [1.21, 1.63]
UC system ^c	.65(.14)***	1.91 [1.45, 2.52]	.60(.15)***	1.81 [1.36, 2.41]	.55(.15)***	1.74 [1.29, 2.34]	.54(.15)***	1.72 [1.27, 2.32]
PHQ/GAD			.24(.08)**	1.27 [1.09, 1.49]	.24(.08)**	1.28 [1.08, 1.51]	.32(.09)***	1.38 [1.16, 1.66]
Perceived MH need			1.06(.21)***	2.87 [1.92, 4.30]	1.04(.21)***	2.83 [1.88, 4.25]	1.04(.21)***	2.82 [1.87, 4.25]
Positive campus climate					.17(.11)	1.18 [.96, 1.45]	.15(.11)	1.16 [.94, 1.44]
Negative campus climate					.02(.12)	1.02 [.81, 1.28]	.06(.12)	1.06 [.83, 1.35]
Campus wide resource					.19(.06)***	1.21 [1.09, 1.36]	.20(.06)***	1.21 [1.08, 1.35]
Undocumented student services					.16(.04)***	1.18 [1.09, 1.27]	.17(.04)***	1.18 [1.09, 1.28]
Discrimination							.06(.13)	1.06 [.83, 1.36]
Social exclusion							-.24(.12)*	.79 [.62, 1.00]
Threat to family							-.09(.10)	.92 [.75, 1.12]
Food insecure							.20(.16)	1.22 [.90, 1.67]

^aReference category is female. ^bReference category is not working. ^cCSU system is the reference category; **p* ≤ .05, ***p* ≤ .01. ****p* ≤ .001.