MEXICAN ORIGIN FIRST-GENERATION COLLEGE STUDENTS
ACTIVATING FUNDS OF KNOWLEDGE TO NAVIGATE BASIC NEEDS INSECURITY

Delma Ramos
The University of North Carolina at Greensboro

Journal Committed to Social Change on Race and Ethnicity
Volume 8, Issue 2 | 2022

Copyright and Open Access
© 2022 Delma Ramos

This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License. Permission of the authors is required for distribution and for all derivative works, including compilations and translations. Quoting small sections of text is allowed as long as there is appropriate attribution and the article is used for non-commercial purposes.

The Journal Committed to Social Change on Race and Ethnicity (ISSN 2642-2387) is published by the National Conference on Race and Ethnicity (NCORE), a production of the University of Oklahoma, in partnership with the University of Oklahoma Libraries.
Mexican origin First-generation College Students Activating Funds of Knowledge to Navigate Basic Needs Insecurity

Delma Ramos
The University of North Carolina at Greensboro

The present study examines the presence of Basic Needs Insecurity (BNI) among Mexican origin first-generation college students. Specifically, this transformative mixed methods study explores BNI in access to healthcare, housing, employment, and transportation among study participants. Most importantly, this research illuminates students’ Funds of Knowledge (FK) as assets and strategies that Mexican origin first-generation college students activate to navigate BNI. Findings reveal higher levels of BNI present among first-generation compared to continuing-generation college students and highlight familial, community, and institutional supports as sources of FK for Mexican origin first-generation college students to address BNI. Implications for research and practice are provided.

According to the National Center for Education Statistics (NCES), Latinos represent the largest ethnically minoritized group in the U.S. undergraduate student population (de Brey et al., 2019). Specifically, in 2018 Latino students accounted for 3.4 million or 24.4% of the total 16.6 million undergraduate student population. Within the Latino panethnic umbrella, Mexican origin students represent the largest ethnic population (U.S. Census Bureau, 2017). While there are no estimates for the proportion of Mexican origin college students who are also first-generation college students, statistics show that about 33% of Latino undergraduate students are first-generation college students (Redford & Mulvaney Hoyer, 2017).

---

1 The term Mexican origin is used to refer to people from Mexican ancestry or of Mexican descent.
2 First-generation students are a) individuals both of whose parents did not complete a baccalaureate degree; or b) any individual who regularly resided with and received support from only one parent that did not complete a baccalaureate degree (TRiO & Gear Up Program Statute, 2011, p. 10).
Mexican origin first-generation college students encounter and navigate unique challenges while pursuing post-secondary education. An emerging body of research explores their experiences in relation to college access (Nuñez & Crisp, 2012; Zerquera, et al., 2018), academic achievement (Covarrubias et al., 2019; Jimenez et al., 2021; Mendiola et al., 2010; Peña, 2013; Rodriguez et al., 2021), and educational ideologies (Kiyama, 2010; Espino, 2016). However, scholarship does not currently examine funds of knowledge as strategies and assets that Mexican origin first-generation college students employ to navigate basic needs insecurity (BNI). Therefore, the purpose of the present study is twofold: to examine the presence of BNI in access to healthcare, housing, employment, and transportation among Mexican origin first-generation college students, and most importantly, to illuminate students’ funds of knowledge in the assets and the strategies they activate to navigate BNI. The research questions guiding this work are 1) How prevalent is BNI in the experience of Mexican origin students by first-generation college student status? And, 2) what funds of knowledge do Mexican origin students activate through assets and strategies to navigate BNI by first-generation college student status? This research adopts the Hope Center for Community, College, and Justice’s definition of Basic Needs Insecurity (BNI) as “a structural characteristic affecting students, not an individual characteristic. It means that there is not an ecosystem in place to ensure that students’ basic needs are met” (2021, p. 6).

**Mexican origin first-generation college students**

Extant research on Mexican origin first-generation college students addresses their postsecondary experiences in relation to demographic and cultural factors (e.g., Aguayo et al., 2011; Alfaro et al., 2018; Alfaro, 2020; Covarrubias et al., 2019; Espino,
2016; Jimenez et al., 2021; Kiyama, 2010; Nuñez & Crisp, 2012; Rodriguez et al., 2021; Zerquera et al., 2018). For example, Alfaro (2020) examined communication patterns and messages between Mexican origin college students and their parents to support student success. Findings suggest parents engaged with students on various topics related to their college experience, including academic goals and overall well-being, through supportive and uplifting messages. Alfaro’s (2020) work builds upon earlier work, which posits family and community engagement as assets to college-going ideologies among Mexican Americans (Kiyama, 2010). Significantly, familial and community information and symbols present among Mexican origin communities positively contribute to pursuing college (Kiyama, 2010). Similarly, Espino (2016) demonstrated that familial roles and expectations are central symbolic manifestations resulting in advantageous family-based beliefs about education. Research further asserts the vital role of the family in the college-going experience of Mexican origin students by defining cultural and academic capital as contributors to students’ decisions on college enrollment, explicitly choosing to enroll at a two-year or four-year institution (Nuñez & Crisp, 2012; Zerquera et al., 2018).

Additionally, research has explored the role of the family in mediating Mexican origin first-generation college students’ coping strategies to the stressors they find in college (Rodriguez et al., 2021). This research determined that students demonstrated close relationships with family to support them in coping with college stressors (Jimenez et al., 2021; Rodriguez et al., 2021), specifically psychological and academic stress. In sum, these studies promote notions that family support plays a crucial role in empowering Mexican origin first-generation students to navigate hardship in college.
Scholarship further examined the persistence to degree completion of Mexican origin first-generation college students also in relation to cultural values and demographic characteristics related to self-efficacy, or students’ confidence in their ability to succeed in college (Aguayo et al., 2011). Their results revealed that students’ socio-economic status, generation status (time of arrival to the U.S.), enculturation, and acculturation as positively and statistically significantly associated with college self-efficacy. Similar work (Alfaro et al., 2018) regarding the self-efficacy of Mexican origin female college students considered the influence of socio-cultural values and behaviors, communication, and relationships with relatives, friends, and professors. This study determined that academic support from mothers, professors, and romantic partners is positively associated with participants’ self-efficacy (Alfaro et al., 2018), once more underscoring the importance of support from family and social networks. These contributions establish a foundation for understanding self-efficacy among Mexican origin first-generation college students and, like the research discussed earlier in this paper, stress the importance of social networks and familial support in navigating college.

Collectively, extant research on the experiences of Mexican origin first-generation college students identifies connections between students’ self-efficacy and relationships within the family and social networks situated within and outside of college spaces. These investigations contribute significant insight into a subset of features integral to college student success. However, the omission of structural socio-economic inequality as manifested through BNI is evident in a lack of attention to, for example, access to housing, healthcare, employment, and transportation. Subsequently, these
contributions to scholarship make evident a dearth of research attentive to a holistic view of Mexican origin first-generation college students’ experiences. Thus, the following sections overview extant literature on Latino students and BNI and research that amplifies the strategies and assets that Mexican origin first-generation college students activate to navigate socio-economic hardships.

**Latinos and BNI**

Extant research on basic needs insecurity (BNI) among college students primarily addresses food insecurity (e.g., Camelo & Elliott, 2019; Goldrick-Rab et al., 2019; Wood et al., 2016), housing insecurity (e.g., Goldrick-Rab et al., 2018; Goldrick-Rab et al., 2019; Wood et al., 2016), and homelessness (e.g., Goldrick-Rab et al., 2018; Goldrick-Rab et al., 2019); however, none of these studies examine the experiences of Mexican origin first-generation college students. Their findings do reveal that Latino students are more likely to be food insecure and housing insecure (Camelo & Elliot, 2019; Goldrick-Rab et al., 2018; Wood et al., 2016; Wood & Harris, 2018) but less likely to report being homeless (Goldrick-Rab et al., 2018). For example, Goldrick-Rab and colleagues (2018) found that among Latino students enrolled at four-year institutions, 42% reported experiencing food insecurity, 39% housing insecurity, and 8% reported homelessness. These figures were slightly more prominent for Latino students enrolled at two-year institutions. Similar results were reported in more recent research (Goldrick-Rab et al., 2019), which found that among Latino students enrolled at four-year institutions, 50% experienced food insecurity, 55 % housing insecurity, and 6% reported experiencing homelessness.
Fewer studies examine the coping strategies students activate to navigate BNI. Research reveals that students often rely on family and friends to address housing insecurity, while some of them turn to public assistance programs to cover food needs, though their ability to receive public aid is complicated by strict regulations that limit their eligibility (Goldrick-Rab et al., 2018; Goldrick-Rab et al., 2019). Other research finds that men of color college students experiencing BNI are less likely to seek support to address BNI within their postsecondary institutions because they perceive BNI support services as unavailable to them (Wood et al., 2016). These studies that highlight the experiences of Latinos with BNI offer a general sense of the landscape of these concerns and some initial insights into the sources of support from which these student populations seek and receive resources to meet their basic needs. The following section highlights research that discusses coping strategies that Mexican origin first-generation college students use to navigate socio-economic hardship.

**Mexican origin first-generation college students navigating socio-economic hardship**

Although not explicitly centering BNI, some research examines the coping strategies of Mexican origin first-generation college students navigating socio-economic hardship. Exploring cultural citizenship of Mexican origin first-generation college students, Benyamor (2002) found that students defined pre-college outreach programs as sources of support for financial and emotional needs. These programs also allowed students to establish and expand their social networks, which in turn became additional sources of support. In similar work with pedagogies of survival among Mexican origin first-generation college students, Campa (2013) studied community college students
navigating social and economic struggles through reliance on culturally situated knowledge and strategies. Campa’s (2013) findings suggested students’ pedagogies of survival included family-modeled problem-solving skills, community-based social networks of reciprocity, and close ties with family members. Students relied on knowledge and strategies drawn from these networks to navigate inequality. As culturally and historically situated, Campa’s (2013) pedagogies of survival empowered students to negotiate intersecting racialized, gendered, and classed struggles and achieve college success.

Correspondingly, Villenas (2001) provided parallel pedagogical understandings between Latina mothers and their daughters in the Southeast region of the U.S. Findings suggested that Mexican origin mothers hoped their daughters would become *mujeres de hogar* (women of the home) and self-sufficient in the face of hardship (Villenas, 2001). Thus, mothers conveyed hopes for their daughters that evoked cultural norms and traditions and taught them lessons that deviated from patriarchal ideals; this dual matriarchal socialization established a vision for Latinas to *llegar a ser* (to become) strong women, disrupting patriarchal subjugation and resisting inequality (Villenas, 2001). Similar findings were reported by Kayumova and colleagues (2015), who examined Mexican mothers’ and their daughters’ ways of knowing, being, and becoming.

The critical role of the family in supporting Mexican origin college students navigating socio-economic hardship is also evident in Sheffield’s (2011) narrative inquiry with first-generation Mexican-American college graduates. This work highlighted students’ familial webs (Stanton-Salazar, 2001) as sources of support in times of
hardship (i.e., securing food and shelter) as students narrated how they frequented family members’ homes within close proximity to the institution, as they were often provided the means to meet their basic needs when they struggled to do so.

Scholarship pertinent to Mexican origin college students navigating inequality demonstrated the essential role of family and kinship networks. Specifically, Mexican origin first-generation students drew from the example of those with whom they share close relationships to navigate and overcome manifestations of inequality. Furthermore, this generative role of close relationships is also evocative of scholarship about these populations’ successes in higher education (e.g., Alfaro et al., 2018). However, neither thread of empirical inquiry explicitly examines Mexican origin first-generation college students’ experience with BNI and students’ FK as strategies and assets to navigate these hardships. Thus, the present research seeks to investigate the centrality of these concepts cohesively and empirically.

**Theoretical framework**

The current study is guided by the funds of knowledge (FK) theoretical framework. Scholars define FK as skills and knowledge developed within and employed by households to navigate inequitable circumstances and contexts (Moll et al., 1992; Vélez-Ibáñez, 1988; Vélez-Ibáñez & Greenberg, 1992). FK are formed, preserved, and transferred within the household and community contexts. Foundational scholars (Vélez-Ibáñez, 1988; Vélez-Ibáñez & Greenberg, 1992) identified a variety of funds of knowledge ranging from knowledge and skills specific to the household and the occupation of household members, and material and scientific knowledge. As such, FK manifest as familial, community, and cultural assets to cope with uncertainty caused by
social, economic, and political disparities and are relevant beyond the household context (Moll et al., 1992; Vélez-Ibáñez, 1988; Vélez-Ibáñez & Greenberg, 1992). FK then are activated by communities systemically minoritized in response and resistance to structural inequality (Moll et al., 1992; Vélez-Ibáñez, 1988; Vélez-Ibáñez & Greenberg, 1992). While the funds of knowledge theoretical framework was initially introduced to the field of education in the 1990s (Ramos & Kiyama, 2021), scholars have extended the theory through its application to study FK across settings and issues (e.g., Esteban-Guitart et al., 2018; Moll et al., 1992; Rodríguez & Salinas, 2019; Zipin, 2009). Recently, Ramos and Kiyama (2021) proposed the following tenets of funds of knowledge, a cohesive set of principles at the core of the framework:

1. FK support communities to challenge power and dominance structures as communities mediate uncertainty caused by economic disparity, political inequality, and differential access to institutional resources (p. 439).

2. FK include a variety of contexts, including familial, household, neighborhood, institutional, and community. Though a large body of research on FK takes place primarily within the familial context, FK exist and manifest across other settings, including communities, relationships, and formal institutions (p.440).

3. When not present within households, FK are accessed and developed through the mobilization of social networks, which challenge notions of historically minoritized communities as socially unorganized. However, individuals turn to formal institutions for assistance when FK cannot be consistently accessed within social networks and communities (p. 440).

4. FK include dynamic cultural practices, including faith and spirituality, and are not simply “a grab bag of tamales, quinceañeras, and cinco de mayo celebrations” (González et al., 1995, p. 456). FK are grounded in lived contexts and inclusive of labor histories (p.441).
5. At the core of FK is a great sense of confianza (mutual trust) between those within one's social network, as a response to contextual uncertainty and scarce resources (p.442).

6. Oral tradition as a means of survival is a key principle of FK (Kiyama, 2011; Stack, 1974) as FK are transferred through oral tradition through generations (p.443).

Funds of knowledge as the present study's theoretical framing helped illuminate the strategies and assets that Mexican origin first-generation college students activate to navigate BNI.

**Methods**

Data presented in this manuscript stem from a larger transformative mixed-methods study (Ramos, 2018) that examined the presence of FK identified in foundational research (Vélez & Ibáñez, 1988; Vélez-Ibáñez & Greenberg, 1992) and the role of FK in supporting student success in college. The study's sample included undergraduate students \((n = 745)\) who identified as first-generation, low-income, and students of color enrolled in their senior year of college across seven four-year institutions in the Mountain region of the U.S. Transformative mixed-methods research takes a stance on social justice issues and seeks the empowerment of historically minoritized populations by examining their experiences through asset-based approaches (Mertens, 2009). A significant component of transformative research is to engage methods best suited for advancing advocacy and social justice goals (Greene, 2007). Given that part of the emphasis of this transformative mixed-methods study was to identify and quantify the FK present within first-generation, low-income, and students of color in college, a survey instrument was developed to accomplish this goal during the quantitative phase of the study. The survey identified and quantified the day-to-day
presence and activation of participants’ foundational funds of knowledge (e.g., Vélez & Ibáñez, 1988; Vélez-Ibáñez & Greenberg, 1992). Quantitative results informed the study’s qualitative phase, which explored the role of FK in empowering participants to successfully navigate the college context and graduate with bachelor’s degrees. Qualitative data were collected via individual interviews and focus groups with 13 participants from the quantitative phase of the study, who agreed to further share their experiences during the qualitative phase.

Furthermore, the Funds of Knowledge theoretical framework offers an anti-deficit perspective for understanding the college experience by illuminating valuable cultural, familial, and community assets and strategies that propel minoritized college students toward success. As such, the FK framework gives substantial value to assets and strategies developed from participants’ realities and lived experiences that are not traditionally valued as crucial knowledge (Moll & Gonzales, 1997; Zipin, 2009). These assets and strategies help mediate power structures and systems that produce adversity and perpetuate inequity. College students creatively mobilize their FK to navigate challenges such as BNI. Consistent with the transformative paradigm and the FK theoretical framework, the present research illuminated first-generation college students’ assets and strategies to navigate BNI. The data presented in this manuscript originate from the quantitative phase of the study (which includes quantitative and qualitative data from the survey) and pertain specifically to participants who identified as Mexican origin ($n = 122$).
Sample profile

The larger study sample \((n = 745)\) included \((n = 122)\) participants who identified as Mexican origin college students. Furthermore, from the subset of Mexican origin students, \((n = 99)\) identified as first-generation college students and \((n = 22)\) identified as continuing-generation college students. As for gender, there were \((n = 24)\) men or 20\% and \((n = 98)\) or 80\% women in the sample. Furthermore, \((n = 105)\) participants or 84.7\% were born in the United States and \((n = 17)\) or 13.7\% were born in Mexico.

Variables of interest

Data from various survey items were analyzed to address the present study’s research questions: 1) How prevalent is BNI in the experience of Mexican origin students by first-generation college student status? And, 2) What funds of knowledge do Mexican origin students activate through strategies and assets to navigate BNI by first-generation college student status? The following items were used to assess basic needs security (BNS) among participants: Are you currently employed? (Y/N), Do you own any of the following (a house, a car)? (Y/N), How easy is it for you to go see a doctor when you get sick? (easy/not easy). This set of dichotomous items (coded 1,0) were used to create a summative construct for BNS, with scores ranging from 0-4. BNS in this work means “there is an ecosystem in place to ensure that students’ basic needs are met” (Hope Center, 2021, p. 6). Then, the following items were used to examine the presence of BNI: How worried are you about the following (0-not worried, 1-worried)? (losing your job, no access to healthcare, losing your home/place to live, losing your car/transportation). These dichotomously coded items were added to create a construct for BNI, with scores ranging from 0-4. An additional item was open-ended: What would
you do if you experienced any of the following? (losing your job, no access to healthcare, losing your house/place to live, losing transportation). Responses were analyzed to explore participants’ FK in strategies and assets to navigate BNI.

**Analysis techniques**

First, the data subsample from the larger study was created to include only Mexican origin (or students who identified as Mexican descent in the demographic section of the survey) students’ responses ($n = 122$). Then, constructed variables pertaining to BNS and BNI were descriptively analyzed by first-generation college student status using SPSS, a statistical software. After examining participants' distribution of responses across the two constructs descriptively, mean comparisons were conducted for first-generation college students and continuing-generation college students on BNS and BNI. Welch’s t-test was used to compare group means due to uneven sample sizes and unequal variances for the first-generation and continuing-generation student groups. The decision to analyze these two variables was informed by the transformative paradigm and the FK framework’s call for methods that help uncover structural inequalities that impact minoritized communities.

Last, responses for the open-ended question that measured FK as assets and strategies participants employ to navigate BNI were examined by first-generation college student status and coded using the FK tenets outlined in the theoretical framework section as *a priori* codes (Saldaña, 2021). These *a priori* codes supported identifying specific assets and strategies from which students drew support. Furthermore, this approach allowed for examining the findings in relation to prior work on Mexican origin first-generation college students’ navigating socioeconomic hardship.
Applying the FK tenets as *a priori* codes for qualitative data analysis aligned with the transformative mixed methods paradigm and the FK theoretical framework’s shared commitment to advocating for and putting forth antideficit perspectives of historically minoritized communities impacted by structural inequality.

**Results and Findings**

Descriptive results suggest that Mexican origin students experience varying levels of BNS by first-generation college student status based on the four areas measured. Descriptive results also suggest that Mexican origin students experience varying levels of BNI by first-generation college student status based on the four areas measured. Qualitative findings additionally demonstrated the presence and activation of assets and strategies central to the tenets of FK.

**Basic Needs Security**

Basic Needs Security (BNS) varied across the sample of Mexican origin college students. Among first-generation students, only 13% ($n = 13$) owned a home while 59.6% ($n = 59$) owned a car, 74.7% ($n = 74$) were employed, and 68.7% ($n = 68$) accessed healthcare with ease when sick, at the time of study. In contrast, continuing-generation students reported slightly greater access to all four areas of BNS. Specifically, 31.8% ($n = 7$) owned a home, 72.7% ($n = 17$) owned a car, 81.8% ($n = 18$) were employed, and 81.8% ($n = 18$) easily accessed healthcare when sick at the time of the study.

These results were confirmed in the descriptive examination of the construct of BNS by first-generation college student status. Specifically, on average, first-generation college students reported lower BNS ($M = 2.46, SD = .87$) than continuing-generation
college students ($M = 2.81$, $SD = .75$). However, a Welch’s t-test to compare group means on BNS revealed no statistically significant differences between first-generation and continuing-generation Mexican origin college students ($t (34) = -1.86$, $p = .07$), indicating that first-generation college student status does not have a significant impact on shaping BNS among Mexican origin college students in the sample.

**Basic Needs Insecurity**

Of the first-generation college students in the sample, 38.4% ($n = 38$) and 47.5% ($n = 47$) were concerned about losing housing and access to transportation, respectively. Furthermore, 19.3% ($n = 29$) expressed concern about losing their current job and 48.5% ($n = 48$) worried about losing access to healthcare. In contrast, among continuing-generation college students, 31.8% ($n = 7$) and 50% ($n = 11$) were concerned about losing housing and access to transportation, respectively. Additionally, 27.3% ($n = 6$) expressed concern about losing their current job and 50% ($n = 11$) worried about losing access to healthcare.

These results were confirmed in the further descriptive analysis of the construct of BNI by first-generation college student status. That is, on average, first-generation college students reported greater BNI ($M = 1.86$, $SD = 1.48$) than continuing-generation college students ($M = 1.67$, $SD = 1.59$). However, a Welch’s t-test used to compare group means on BNI revealed no statistically significant differences between first-generation and continuing-generation Mexican origin college students ($t (29) = .511$, $p = .61$), indicating that first-generation college student status does not have a significant impact on shaping BNI among Mexican origin college students in the sample.

**Funds of Knowledge that Mexican origin Students Activate to Navigate BNI**
To further contextualize findings regarding assets and strategies to navigate BNI, students provided open-ended survey responses to the following question: *What would you do if you experienced any of the following? (losing your job, no access to healthcare, losing your house/place to live, losing transportation)*. The analysis of qualitative data from open-ended responses \((n = 84)\) included first-generation \((n = 67)\) and continuing-generation \((n = 17)\) college students. Applying the FK tenets (Ramos & Kiyama, 2021) as *a priori* codes revealed common strategies and assets among Mexican origin students regardless of first-generation college student status. Specifically, findings revealed that both first-generation and continuing-generation college students highlighted *familial support*, *strategic management of resources*, *reliance on social networks and formal institutions*, and *faith and spirituality*, to navigate BNI. All these are elements centered in the tenets of FK.

**Familial support**

As outlined in the first and second tenet of FK, *familial support* was critical for students navigating socioeconomic inequality. First-generation college students \((n = 24)\) referenced familial support compared to fewer continuing-generation college students \((n = 7)\). A first-generation college student who centered familial support in their responses shared, “I know my parents and other family members would immediately help me out until I am able to fix the problem without expecting anything in return.” Another first-generation college student shared: “I can only turn to my family for help.” Similarly, a continuing-generation college student expressed: “I would rely on my parents/family,” and another student responded, “I would try to reach out to family for emotional and financial support.” These responses reveal the importance of family support to mediate
uncertainty in BNI and the role of *confianza* (mutual trust) to facilitate access to scarce resources among first-generation and continuing-generation Mexican origin college students.

**Strategic management of resources**

Managing resources creatively and strategically is another key feature of funds of knowledge present in qualitative data. Several first-generation (*n* = 21) and some continuing-generation college students (*n* = 4) expressed strategic management of resources in their responses to navigating BNI, a core component of funds of knowledge. For example, a first-generation student shared “I would connect with others and reach out” highlighting possibilities for support within their social networks, a core element of FK illustrated in the mobilization of social networks to navigate inequality. Likewise, another first-generation college student shared, “I would do what I could to get money such as offer household cleaning, childcare, and even donate plasma to keep going.” These students expressed agency and mobilization of resources in navigating BNI. Continuing-generation college students shared similar sentiments: “Figure out how to get out of that situation. Look for an alternative or a solution” and “Worry but still find a way to make things work.” These responses highlight student agency and their ability to access and creatively mobilize resources to meet their needs.

**Social networks and formal institutions**

Several first-generation (*n* = 23) and continuing-generation (*n* = 8) students centered social networks and formal institutions in their responses to navigating BNI. Statements indicative of these elements included a first-generation college student who shared, “Hopefully I am able to find employment where I am offered benefits. Right now,
as I am in school, it is difficult to afford healthcare. The current employment I have only pays me through work-study.” Similarly, another first-generation college student expressed, “I would find another job immediately, a full-time job to pay for health care, and I would also ask to stay at a friend’s home, ask a friend to borrow a car to get to clinicals.” Among continuing-generation students, responses referenced social networks and formal institutions. For example, one student stated, “I would have to find someone to drive me to work and school;” similarly, another student expressed, “I would try to find a facility that was able to work with me and help me get the necessities I need.” The role of social networks was evident in students’ intention to reach out for support when in need. Likewise, the role of formal institutions emerged as students planned on securing employment to access benefits.

**Faith and spirituality**

As critical components of the FK tenets, faith and spirituality were less common though evident in response to: *What would you do if you experienced any of the following? (losing your job, no access to healthcare, losing your house/place to live, losing transportation)*. First-generation (*n = 3*) and continuing-generation (*n = 1*) students referenced faith and spirituality in their responses, often accompanied by other strategies. For example, a first-generation college student shared, “I would pray, and then ask someone to refer me to someone that could help me.” Similarly, another first-generation student added, “Pray that all the good deeds I’ve done in life come back to help me.” Parallel sentiments were expressed by a continuing-generation college student who noted, “Pray and go find an answer.” Despite less frequency among
respondents, faith and spirituality were additional FK assets and strategies students described.

Discussion

This study examined the presence of BNI among a sample of Mexican origin first-generation college students and the assets and strategies that students mobilized as FK to navigate BNI. Extant BNI research primarily emphasizes food and housing insecurity and homelessness (Camelo & Elliot, 2019; Goldrick-Rab et al., 2018; Wood et al., 2016; Wood & Harris, 2018), disaggregates only by panethnic racial and ethnic groups and has yet to center on the experiences of first-generation college students. As such, the results and findings from this research contribute to expanding BNI scholarship by illuminating the experiences of Mexican origin first-generation college students, precisely about housing, transportation, employment, and healthcare needs insecurity.

In relation to recent work on housing insecurity (Goldrick-Rab et al., 2018; Goldrick-Rab et al., 2019; Wood et al., 2016), the present study found that over a third of Mexican origin first-generation and continuing-generation college students reported concerns about experiencing housing insecurity. These results echo prior work that found that Latino students are more likely to experience BNI in housing (Goldrick-Rab et al., 2018; Goldrick-Rab et al., 2019; Wood et al., 2016). Some of these studies reported housing insecurity rates among Latino college students ranging from 39% (Goldrick-Rab et al., 2018) to 55% (Goldrick-Rab et al., 2019).

Study results also underscore the urgency to continue examining the experiences of Mexican origin first-generation college students, as this research did not
find statistical significance of first-generation college student status on BNI. Although results did suggest greater levels of BNI among first-generation college students than continuing-generation students, this difference was mainly driven by greater housing insecurity reported by first-generation college students. Indeed, continuing-generation college students reported concerns for BNI in transportation, employment, and healthcare at higher levels than first-generation college students. This result complicates the narrative that frames Mexican origin first-generation college students at a disadvantage in college due to their first-generation college student status (Aguayo et al., 2011; Covarrubias et al., 2019) and warrants further examination.

Findings focused on the FK that Mexican origin first-generation college students activate to navigate BNI illuminate similar assets and strategies employed, regardless of first-generation college student status. These FK also echo and add to extant research on the supports and strategies this student population relies on to navigate socio-economic hardship. For example, prior work highlights family and friends as key supporters in this population's college experience (Campa, 2013; Jimenez et al., 2021; Peña, 2013; Sheffield, 2011). BNI research that examines these challenges among Latino students also found that family and social networks are key sources of support for students to address BNI (Goldrick-Rab et al., 2018; Goldrick-Rab et al., 2019).

These findings are also consistent with FK foundational and more recent research (Ramos, 2018; Esteban-Guitart et al., 2018; Rodriguez & Salinas, 2019; Vélez-Ibáñez & Greenberg, 1992) that highlights family and friends are some of the greatest assets and sources of knowledge and strategy development among minoritized communities.
Interestingly, findings related to the centrality of family as support in addressing BNI in consideration of the demographics of the study’s sample resonate with prior work. Specifically, the majority of study participants (80%) identified as women. While gender was not a part of the current study’s analysis because of its focus on the intersection of Mexican ethnicity and first-generation college status, prior work (Alfaro et al., 2018) determined that Mexican origin college students who identify as women tend to retain closer ties to their families while in college. These close ties with family strengthen Mexican origin college women’s perception that family is their greatest source of support in hardship. This conclusion necessitates further research to clarify the relationship of gender with BNI and support systems.

Other coping strategies such as FK, consistent with extant research on how Mexican origin first-generation college students navigate hardship, include notions of self-efficacy (Alfaro et al., 2018). However, the present study also complicates and adds to traditional notions of self-efficacy as an individualistic endeavor. Precisely, findings illustrate the connections between the drive to identify solutions to address BNI and the reliance on family, social networks, and formal institutions to secure support to meet basic needs. For example, first-generation and continuing-generation college students intended to “figure it out” when facing BNI by identifying possible additional sources of income, securing a job with benefits, and reaching out to family and friends to get referrals to public assistance to address BNI.

The findings from this research also expand current understandings of how Mexican origin first-generation college students navigate hardship by asserting the centrality of formal institutions such as employers providing jobs with benefits and the
importance of public assistance programs as possibilities for additional support to meet their basic needs. Findings also revealed the centrality of reciprocity in sentiments of students praying that they would find support as they have done “good deeds” in life. Reciprocity is a key component of FK (González et al., 1995) but its relationship with faith and spirituality remains underexamined. This finding presents opportunities for future research. Collectively, the insights gained from this research resonate with current understandings of BNI and add to contextualizations of how Mexican origin first-generation college students experience and navigate BNI in housing, transportation, employment, and healthcare.

**Implications**

This study poses implications for research and practice. Further examinations of Mexican origin college students’ experiences with BNI are needed as extant research remains scarce. A close look at the role of first-generation college student status is warranted as this study found no statistically significant differences in BNI and BNS. Work addressing this topic would significantly contribute to clarifying the impacts of first-generation college status on BNI, both the prevalence of BNI and the strategies in which students engage. Additionally, while the present study focused on the intersection of Mexican origin ethnicity and first-generation college student status, it did not account for other demographic characteristics of students. For example, accounting for the role of gender and class could further strengthen the analysis of BNI among this student population. This focus is especially relevant to scholarship concerned with developing equitable campus supports and serving minoritized students holistically.
In the same vein, BNI research has gained greater attention in the past few years, but their analyses are yet to be disaggregated at more granular levels, for instance, ethnicity (beyond panethnic groups), first-generation college student status, class, ability, etc. Given the great diversity among college students, producing more refined analyses can bring to light the experiences and needs of communities traditionally absent from these studies and assumed to not be present on the college campus.

Implications for practice present opportunities to transform the wisdom students shared regarding support for BNI. For example, findings revealed that students relied on family and social networks to support their basic needs. Higher education institutions can leverage these ideas by developing structures that facilitate the engagement and support of families and social connections in the experience of college students. Parent and family programs exist but focusing on addressing BNI would increase their capacity to serve parents, families and students. These efforts can include outreach to parents, families, and additional people in students’ social networks to develop a database of low-cost housing opportunities, shared and low-cost transportation, and access to employment, food, and healthcare that students can consult when in need.

Stronger partnerships with external formal institutions are important in supporting students to address BNI. Findings suggest the importance of beneficial employment and public assistance. Institutions of higher learning can better connect students with external support by becoming aware of public aid, eligibility requirements, and guidance to share with students as they experience basic needs. Establishing a center or office that supports students’ basic needs would be a great setting. The findings of this study
call for expanded awareness of the presence of BNI on the college campus. Although national centers that study BNI are spearheading research in this area, it is imperative for institutions to also engage in this practice by assessing the prevalence of BNI on their campus. This is the first step toward creating holistic student support and services.

Conclusion

This study examined the presence of Basic Needs Insecurity (BNI) among Mexican origin first-generation students and the assets and strategies that students employ to navigate BNI. Results suggest that in comparison to continuing-generation Mexican origin students, BNI is more prevalent among first-generation students. Furthermore, findings illuminate students’ FK as assets and strategies that Mexican origin first-generation students mobilize to navigate BNI generated from within the familial, community, and institutional contexts.

References

Aguayo, D., Herman, K., Ojeda, L., & Flores, L. Y. (2011). Culture predicts Mexican Americans’ college self-efficacy and college performance. *Journal of Diversity in Higher Education, 4*(2), 79-89. https://doi.org/10.1037/a0022504
Alfaro, E. C., Weimer, A. A., & Castillo, E. (2018). Who helps build Mexican-origin female college students’ self-efficacy? The role of important others in student success. *Hispanic Journal of Behavioral Sciences, 40*(4), 431-447. https://doi.org/10.1177/07339986318802588
Alfaro, E. C. (2020). Communication frequency and types of supportive messages: A mixed methods approach to examining Mexican-origin college students’ relationships with their mothers and fathers. *Journal of Hispanic Higher Education, 19*(1), 52-68. https://doi.org/10.1177/1538192718772663
Benmayor, R. (2002). Narrating cultural citizenship: Oral histories of first-generation college students of Mexican origin. *Social Justice, 29*(4), 96-121.
Camelo, K., & Elliott, M. (2019). Food insecurity and academic achievement among college students at a public university in the United States. *Journal of College Student Development, 60*(3), 307-318. https://doi.org/10.1353/csd.2019.0028
Campa, B. (2013). Pedagogies of survival: Cultural resources to foster resilience among Mexican-American community college students. *Community College Journal of
Covarrubias, R., Valle, I., Laiduc, G., & Azmitia, M. (2019). “You never become fully independent”: Family roles and independence in first-generation college students. *Journal of Adolescent Research, 34*(4), 381-410. https://doi.org/10.1177/0743558418788402

de Brey, C., Musu-Gillette, L., McFarland, J., Wilkinson-Flicker, S., Diliberi, M., Zhang, A., Branstetter, C., Wang, X., & National Center for Education Statistics. (2019). *Status and trends in the education of racial and ethnic groups, 2018*. U.S. Department of Education, National Center for Education Statistics, Institute of Education Sciences. https://nces.ed.gov/pubs2019/2019038.pdf

Espino, M. M. (2016). The value of education and educación: Nurturing Mexican American children's educational aspirations to the doctorate. *Journal of Latinos and Education, 15*(2), 73-90. https://doi.org/10.1080/15348431.2015.1066250

Esteban-Guitart, M., Serra, J. M., & Llopart, M. (2018). The role of the study group in the funds of knowledge approach. *Mind, Culture, and Activity, 25*(3), 216-228. https://doi.org/10.1080/10749039.2018.1448871

Greene, J. C. (2007). *Mixed methods in social inquiry*. Jossey-Bass.

Goldrick-Rab, S., Richardson, J., Schneider, J., Hernandez, A., & Cady, C. (2018). *Still hungry and homeless in college*. Wisconsin HOPE Lab.

Goldrick-Rab, S., Baker-Smith, C., Coca, V., Looker, E., & Williams, T. (2019). *College and university basic needs insecurity: A national #realcollege survey report*. The Hope Center.

González, N., Moll, L. C., Tenery, M. F., Rivera, A., Rendon, P., Gonzales, R., & Amanti, C. (1995). Funds of knowledge for teaching in Latino households. *Urban Education, 29*(4), 443–470.

Greene, J. C. (2007). *Mixed methods in social inquiry*. Jossey-Bass.

Jimenez, A., Piña-Watson, B., & Manzo, G. (2021). Resilience through family: Family support as an academic and psychological protective resource for Mexican descent first-generation college students. *Journal of Hispanic Higher Education, 21*(3), 352-363. https://doi.org/10.1177/1538192720987103

Kayumova, S., Karsli, E., Allexsaht-Snider, M., & Buxton, C. (2015). Latina mothers and daughters: Ways of knowing, being, and becoming in the context of bilingual family science workshops. *Anthropology & Education Quarterly, 46*(3), 260-276. https://doi.org/10.1111/aeq.12106

Kiyama, J. M. (2010). College aspirations and limitations: The role of educational ideologies and funds of knowledge in Mexican American families. *American Educational Research Journal, 47*(2), 330–356. https://doi.org/10.3102/0020311X10377896

Kiyama, J. M. (2011). Family lessons and funds of knowledge: College-going paths in Mexican American families. *Journal of Latinos and Education, 10*(1), 23–42. https://doi.org/10.1080/15348431.2011.531656 doi:10.1080/15348431.2011.531656

Mendiola, I. D., Watt, K. M., & Huerta, J. (2010). The impact of advancement via individual determination (AVID) on Mexican American students enrolled in a 4-
year university. *Journal of Hispanic Higher Education, 9*(3), 209-220.
https://doi.org/10.1177/1538192710368313

Mertens, D. M. (2009). *Transformative research and evaluation*. Guilford Press.

Moll, L. C., Amanti, C., Neff, D., & Gonzalez, N. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory Into Practice, 31*(2), 132–141.
https://doi.org/10.1080/00405849209543534

Moll, L. C., & Gonzalez, N. (1997). Teachers as social scientists: Learning about culture from household research. *Race, Ethnicity, and Multiculturalism: Policy and Practice, 1*, 89–114.

Nuñez, A. M., & Crisp, G. (2012). Ethnic diversity and Latino/a college access: A comparison of Mexican American and Puerto Rican beginning college students. *Journal of Diversity in Higher Education, 5*(2), 78-95.
https://doi.org/10.1037/a0026810

Peña, C. C. (2013). Academic achievement of first-generation Mexican American males in a community college. *Journal of International Education and Leadership, 3*(1), 1–11.

Ramos, D. (2018). *Funds of knowledge and the college Success of first-generation students, low-income students, and students of color: A transformative mixed methods study* (Order No. 10823984) [Doctoral dissertation, University of Denver]. ProQuest Dissertations and Theses Global.

Ramos, D., & Kiyama, J. M. (2021). Tying it all together: Defining the core tenets of funds of knowledge. *Educational Studies, 57*(4), 429-449.
https://doi.org/10.1080/00131946.2021.1904932

Redford, J., Mulvaney Hoyer, K., & National Center for Education Statistics. (2017). First generation and continuing-generation college students: A comparison of high school and postsecondary experiences. *U.S. Department of Education, National Center for Education Statistics, Institute of Education Sciences*. https://nces.ed.gov/pubs2018/2018009.pdf

Rodriguez, S. L., Garbee, K., & Martínez-Podolsky, E. (2021). Coping with college obstacles: The complicated role of familia for first-generation Mexican American college students. *Journal of Hispanic Higher Education, 20*(1), 75–90.
https://doi.org/10.1177/1538192719835683

Rodríguez, N. N., & Salinas, C. S. (2019). “La lucha todavía no ha terminado”/The struggle has not yet ended: Teaching immigration through testimonio and difficult funds of knowledge. *Journal of Curriculum Theorizing, 34*(3), 136-149.
https://doi.org/10.1177/1538192719835835

Saldaña, J. (2021). *The coding manual for qualitative researchers*. Sage.

Sheffield, M. L. (2011). *Stories of success: First-generation Mexican-American college graduates* (Order No. 3466449) [Doctoral dissertation, Arizona State University]. ProQuest Dissertations and Theses Global.

Stack, C. (1974). *All our kin*. Basic Books.

Stanton-Salazar, R. D. (2001). *Manufacturing hope and despair: The school and kin support networks of US-Mexican youth*. Teachers College Press.

The Hope Center for College, Community, and Justice. (2021). #RealCollege 2021: Basic Needs Insecurity During the Ongoing Pandemic.
TriO & Gaining Early Awareness & Readiness For Undergraduate Programs (gear up) program statute. (2010). Federal Register. https://www2.ed.gov/programs/gearup/index.html

U.S. Census Bureau. (2017). 2013-2017 American Community Survey 5-year Estimates. https://www.census.gov/acs/www/data/data-tables-and-tools/data-profiles/2017/

Vélez-Ibáñez, C. G. V (1988). Networks of exchange among Mexicans in the US and Mexico: Local level mediating responses to national and international transformations. Urban Anthropology and Studies of Cultural Systems and World Economic Development, 17(1), 27–51.

Vélez-Ibáñez, C. G. V., & Greenberg J. (1992). Formation and transformation of funds of knowledge among U.S.-Mexican households. Anthropology and Education Quarterly, 23(4), 313–335.

Villenas, S. (2001). Latina mothers and small-town racisms: Creating narratives of dignity and moral education in North Carolina. Anthropology & Education Quarterly, 32(1), 3-28. https://doi.org/10.1525/aeq.2001.32.1.3

Wood, J. L., Harris III, F., & Delgado, N. R. (2016). Struggling to survive–striving to succeed food and housing insecurities in the community college. Community College Equity Assessment Lab.

Wood, J. L., & Harris III, F. (2018). Experiences with “acute” food insecurity among college students. Educational Researcher, 47(2), 142-145. https://doi.org/10.3102/0013189X17752928

Zerquera, D. D., Acevedo-Gil, N., Flores, E., & Marantal, P. (2018). Repositioning trends of Latina/o/x student enrollments in community colleges. Association of Mexican American Educators Journal, 12(1), 86-106. https://doi.org/10.24974/amae.12.1.379

Zipin, L. (2009). Dark funds of knowledge, deep funds of pedagogy: Exploring boundaries between lifeworlds and schools. Discourse: Studies in the Cultural Politics of Education, 30(3), 317–331. https://doi.org/10.1080/01596300903037044