Navigating Cultural Differences: A Quantitative Study of the Immigrant/International Student Experience in American universities

Anonymous Authors
Rochester Institute of Technology
Rochester, New York

ABSTRACT
This study explores the cultural and communication barriers encountered by immigrant and international students in American universities. We conducted an online survey using a convenience sample of 16 responses, primarily from graduate-level international students. Our research addressed two questions: What are the cultural barriers that these students face? And does better communication cause greater comfort with US healthcare providers? Analysis using descriptive statistics and Chi-square tests revealed that immigration/visa status, duration of US residence, and self-rated English proficiency are significantly associated with possessing a personal healthcare provider. We conclude that communication and acculturation are critical factors limiting access to essential services and suggest interventions like multilingual navigation materials and targeted orientation sessions.

1. INTRODUCTION

There are numerous immigrant and international students at universities in America. Often, these students face cultural and communication barriers that make it difficult to adapt to academic, social, and healthcare norms. These barriers would cause problems in their daily life and well being. Knowing these challenges is important to improve support systems for international and immigrant students in America to ensure they can access both education and healthcare effectively. One of the barriers that has a huge impact on health care is communication. In literature review by Hacker et al. (2015), immigrants faced barriers on accessing healthcare services due to language and cultural differences. Ahmed et al.. (2015) shows that communication plays a critical role in healthcare and miscommunication can cause doctors to get frustrated with immigrant patients' needs, which could eventually lead to poor health outcomes [2]. In "Healthcare Communication Barriers and Self-Rated Health in Older Chinese American Immigrants" by Tsoh et al (2016), it was stated that limited English proficiency was correlated with poor health after health care service.[3] However, the limitation in this study is lack of diverse participants due to the participants being only older Chinese American immigrants, and leaving out on international students. Another barrier that international students face is job employment. Lee, J., Kim, N. and Su, M. (2021) found that despite international students completing their bachelors degree, there is a higher mean and standard deviation of not having a full time job or graduate school than US born natives. [4] This shows that cultural and communication barriers may go beyond the classroom, and into their future career. Our motivation to research this phenonmenon is to understand the cultural barriers that immigrant and international students face while studying in American universities. Our research explores two primary research questions:

RQ1. What are cultural barriers that immigrant/international students face while studying in American universities?

RQ2. Does better communication cause greater comfort with US healthcare providers for immigrant/international students?

To address these questions, we conducted an online survey on immigrant and international students to identify key cultural barriers affecting students' experience in American universities.

2. METHODS: ONLINE SURVEY

We conducted a quantitative online survey to understand the cultural barriers that immigrant and international students face while studying in American universities (RQ). This study used a series of nominal and ordinal questions to gather data on our participants demographics, cultural integration, academic experiences, and challenges faced.

2.1 Materials

Our online questionnaire included 23 questions structured around a few thematic areas. Firstly, we explore demographic and background information like age group, student enrollment status (current student vs recent graduate), current student level, immigration/visa status, time residing in the United Status (US), and country of origin. To assess cultural integration and comfort, we measured a few questions with ordinal scales (1 to 5). We covered English proficiency, ease of finding people of the same background and home country foods, level of connectedness to home culture, frequency of accent-related challenges, and comfort or pressure felt with US clothing styles. We used the same method to assess academic experiences, by covering cultural respect from peers and instructors, perceived educational differences between home country and US teaching methods, and ease of understanding faculty. In order to truly understand the challenges of immigrant students in US universities, we included a mixture of multiple-choice and free-text follow-up questions. We focused on identifying challenges they've faced in the past year, whether financial, co-op search, or healthcare related, and dove deeper into the details. The questionnaire included categorical and ordinal response options to facilitate our statistical analysis. We relied on the Chi-Square test of association to identify relationships between student background and the barriers they reported.

2.2 Procedure

Our survey was designed to be quick and efficient. Participants took no longer than 10 minutes to complete the questionnaire. Qualtrics was utilized to deploy the online survey and host it publicly for around 1.5 weeks.

The recruitment strategy was to target as many immigrant and international students we knew at RIT or through our personal networks. Our preferred audience was current students, but allowed recent graduates (less than 5 years) to also participate in the study. We used a convenience sample approach by sharing the link through social media groups and our close friends.

Participation in this study was voluntary and they were allowed to withdraw at any time. We did not collect any identifying information from the participants. Due to the financial constraints of being a student, there was no monetary reward to completing the questionnaire. All questions that were presented to the participants were optional, except the demographic questions, and included appropriate skip logic to dive deeper with follow-up questions. For example, only those that indicated they did not have a healthcare provider were asked for the reason.

2.3 Participants

We collected a total of 25 responses, with 16 that were deemed useful for analysis. The exclusion of 8 participants was due to incomplete surveys or not fitting criteria (older than 17 years old, in college or graduated recently, from a foreign country). We did not collect participants' gender identity. The age of participants ranged from 18 to 40 or above, with the 18-24 category being the most frequent (n=12) A large majority of participants were active college students (n=17).

2.3.1 Student level and Visa status

Most participants were enrolled at the Graduate level (n=14). The dominant Visa status was International Student (F-1 visa, J-1 visa, etc.) (n=13), followed by Immigrant (U.S Citizen, Permanent resident, etc.) (n=3).

2.3.2 Duration and origin

Participants reported living in the US for periods ranging from Less than 1 year (n=7) to More than 10 years (n=3). The most frequently reported country of origin in this sample was India (n=7).

2.3.3 Experiences

Analysis of the struggles immigrant and international students are facing was accessed asking "In the past year, have you experienced any of the following? (Financial struggles, difficulty finding co-ops/internships, challenges with healthcare access)". Results showed that Financial Struggles was the most commonly reported challenge among the sample. Further details regarding the distribution of specific challenges may be found in the Results section.

3. RESULTS

3.1 Findings

This section presents the findings from our quantitative survey as documented in the tables. Initially, we summarize the sample to provide information about age, student level/status, duration of residence in the U.S., English proficiency, and country of origin. We subsequently present bivariate associations pertinent to our research inquiries, concentrating on two outcome domains: (a) healthcare engagement (whether participants indicate having a personal healthcare provider) and (b) perceived academic disparities (consensus that U.S. teaching methodologies differ from previous experiences). The analyses are

descriptive and based on chi-square tests; where the tables demonstrate statistical significance, we emphasize the relationship's direction by examining the observed cell patterns (e.g., which groups cluster in "Yes/No" or "Agree/Disagree"). No information beyond the supplied tables is presented, and interpretation is constrained by the published sample sizes and cell counts. This framework reflects the reference cadence—context initially, followed by focal relationships—to distinctly highlight the emergence of cultural and communicative impediments prior to addressing implications.

3.1.1 Descriptive Overview

The sample predominantly consists of graduate students (81.3%), with the majority of individuals already enrolled in a U.S. college (88.2%). The respondents are predominantly young, with 66.7% aged 18–24 and 22.2% aged 25–31, whereas there are few representations under 17 or over 40 (5.6%). The majority identify as international students (81.3%), while a lesser proportion belong to the immigrant category (citizen/permanent resident) at 18.8%. The countries of origin are varied, with India constituting the majority, alongside Cuba, Colombia, Honduras, and Spain. In the United States, the duration of residency is predominantly among recent immigrants: 43.8% have resided for less than one year, 31.3% for one to three years, and 18.8% for over 10 years. Self-assessed English ability is predominantly categorized as “Good” (68.8%), succeeded by “Excellent” (18.8%) and “Average” (12.5%). The descriptive profile indicates a primarily foreign group composed largely of graduates who are experiencing recent migration, academic integration, and language adaptation, which informs the ensuing studies of healthcare engagement and academic adjustment.

3.1.2 Associations relevant to cultural and communication barriers

We examined bivariate associations between acculturation characteristics (immigration/visa status, duration of residence in the U.S., English ability) and two outcomes: (1) healthcare participation (personal provider) and (2) perceived academic disparities (U.S. teaching methodologies). Notable chi-square results are given here based on observed cell patterns; interpretations are tentative due to tiny cell sizes and are confined to the cohort.

3.1.2.1 Healthcare access/engagement

Possessing a personal healthcare provider demonstrates notable correlations with three acculturation-related characteristics. Initially, immigration/visa status correlates with the reporting of a personal provider (χ^2=5.63, df=1, p=0.018; N=9): immigrants (citizens/permanent residents) predominantly select "Yes," while foreign students predominantly select "No." Secondly, duration of residence in the U.S. correlates with provider status (χ^2=9.00, df=3, p=0.029; N=9): individuals with “More than 10 years” predominantly fall within the “Yes” category, whereas those with “Less than 1 year” predominantly fall within the “No” category, suggesting a tenure gradient in healthcare engagement. Third, English proficiency correlates with provider status (χ^2=9.00, df=2, p=0.011; N=9): “Excellent” proficiency is prevalent in the “Yes” category, whereas “Good” proficiency is predominantly found in the “No” category, indicating that linguistic confidence may facilitate the management of appointments, insurance, and clinical communication. Collectively, these trends suggest that status, duration of residence, and self-assessed English proficiency are associated with healthcare participation among participants in our sample.

3.1.2.2 Perceived academic differences

Perceptions that U.S. pedagogical approaches diverge from previous experiences are correlated with background and linguistic confidence. The immigration/visa status is associated with these perceptions (χ^2=10.2, df=3, p=0.017; N=16): international students are more inclined to assert that teaching techniques vary, exhibiting notable clustering at “Somewhat agree” and “Strongly agree.” English proficiency is similarly linked to perceived disparities (χ^2=13.9, df=6, p=0.031; N=16), with the distribution of agreement levels differing by proficiency category. The results indicate that instructional differences are perceived and understood through cultural and language perspectives, consistent with the overall context of academic adaptation for newly arrived international students.

3.1.3 Integrated summary

The cohort is primarily composed of graduate students, international individuals, and those in the early stages of their U.S. residency, with the majority self-assessing their English proficiency as "Good." In this context, three acculturation variables—immigration/visa status, duration of residence in the U.S., and English proficiency—correlate with healthcare participation (indicating a personal provider). Simultaneously, immigration or visa status and English competence correlate with the perception of U.S. teaching methodologies as distinct. Initially presenting the descriptive context followed by the focal associations offers a clear, survey-supported explanation of the constraints encountered in daily health and academic environments,

facilitating the ensuing discussion of consequences without adding any further data beyond the assignment tables.

3.1.4 Scope and Caution

All interpretations are confined to the contingency patterns and chi-square results presented in the survey tables, some of which include tiny sample sizes (e.g., N=9). The findings should be interpreted as representative of this cohort rather than universally applicable, while nevertheless offering a cohesive, data-driven foundation for considering communication, acculturation, and support requirements in healthcare and academic settings.

4. DISCUSSION

4.1 Preferences

In our research, we explored our two primary research questions through conducting an online survey. Our data indicates clear patterns in what recent immigrant and international students in this sample prefer when interacting with U.S. academic and healthcare systems. Participants with longer residence in the United States and higher self-rated English proficiency were more likely to report having a personal healthcare provider, which suggests a preference for continuity of care, or possible feelings of self-efficacy impacting one's ability to pursue healthcare. In the academic domain, international students were likely to report that U.S. teaching and systemic methods differ from their prior experience, which implies a need for clearer explanations of course expectations and common classroom practices such as office hours, participation, and academic integrity. Overall, these patterns show that these students favor structured and navigable systems, like language-accessible materials. These preferences align with prior literature, discussed in the introduction, showing that limited English proficiency and cultural mismatch reduce satisfaction and access to services in healthcare. For universities, support services such as multilingual orientation materials, health-system walkthroughs, and targeted onboarding for recent arrivals would likely address many expressed needs.

4.2 Barriers

The survey results reinforce communication and acculturation as core barriers that have practical downstream effects in multiple areas. Immigration or visa status, time in the United States, and self-rated English proficiency were each associated with whether participants had a personal healthcare provider, which suggests mechanisms including practical navigation difficulties with insurance and appointments, linguistic barriers during intake and visits, and informational gaps for recent arrivals. On the academic side, international students' stronger perception that U.S. pedagogy differs from their prior schooling points to a cultural-pedagogical barrier that can impede participation and performance. The employment issues discussed in the introduction suggest that the same cultural and communication barriers may also affect transitions from study to work. Taken together, communication barriers affect daily functioning, academic adaptation, and early career outcomes. Small cell sizes in some chi-square tests mean these associations should be interpreted cautiously, but they are consistent with theory and prior research.

4.3 Limitations

Several limitations reduce generalizability. The sample was small and recruited through convenience methods within the research team's networks, which likely produced demographic clustering and selection bias. Measures relied mainly on self-report with ordinal scales rather than validated multi-item instruments, and identifying variables such as gender identity, socioeconomic status, and field of study were not collected. The study's cross-sectional design prevents causal inference, so it is not possible to determine whether variables such as limited English leads to lack of a provider. Small cell sizes also limit statistical power and may violate chi-square assumptions of large sample sizing. Finally, the sample reflects a particular campus and social environment and may not generalize to institutions with different international student populations or support structures. Despite these limitations, the study provides useful, hypothesis-generating insights into communication and acculturation as they relate to healthcare engagement and academic experience.

4.4 Practical implications

College campuses and healthcare providers can take several actionable steps based on these findings. Multilingual and straightforward language navigation materials should be provided to explain how to choose a provider, make appointments, and understand insurance. Targeted orientation sessions for recently migrated students can include walkthroughs of healthcare visits and academic expectations. Expanding interpreter services in campus clinics and career centers and advertising those services clearly to international students would address linguistic barriers. Peer-navigator or mentorship programs can pair more-established students with newcomers to facilitate both academic and healthcare navigation. Career services should offer culturally informed job search workshops that address

communication norms and visa-related employment constraints.

5. CONCLUSION AND FUTURE WORK

5.1 Conclusion

Our exploratory survey suggests that communication and acculturation variables, specifically immigration or visa status, duration of U.S. residence, and self-rated English proficiency, are meaningfully associated with healthcare engagement as measured by possession of a personal healthcare provider and with perceptions of pedagogical differences among immigrant and international students. Financial struggles were the most commonly reported challenge overall, while communication-related barriers appear to operate across domains, limiting access to healthcare, complicating academic adaptation, and likely influencing early career outcomes. Although findings are constrained by small sample size and convenience sampling, they reinforce prior literature and point toward concrete institutional interventions to reduce these barriers.

5.2 Future work

Future research should scale and diversify sampling by conducting large-scale surveys with stratified recruitment to capture undergraduate and graduate balances, broader geographic representation, and a wider range of countries of origin. Studies should use validated measures of acculturation and English proficiency, collect objective indicators such as insurance status, and gather academic performance metrics and employment outcomes. Mixed-methods and longitudinal designs that combine surveys with in-depth interviews or focus groups would clarify causal pathways and document change over time as students acclimate. Intervention studies are needed to evaluate navigator programs, multilingual orientation workshops, and targeted clinic outreach using randomized or quasi-experimental designs. Finally, policy and practice evaluations should examine how institutional policies such as interpreter availability and specialized career counseling affect measurable outcomes for international and immigrant students.

5.3 Final takeaway

Communication is a central factor in immigrant and international students' access to healthcare and academic integration. Modest, well-targeted supports that reduce linguistic and navigational friction, especially for very recent arrivals and students who rate their English as good but not excellent, may yield important improvements in health outcomes, academic success, and career trajectories.

REFERENCES

[1] Hacker, K. *et al.* (2015a) 'Barriers to health care for undocumented immigrants: A literature review', *Risk Management and Healthcare Policy*, p. 175. doi:10.2147/rmhp.s70173

[2] Ahmed, S. *et al.* (2015) 'Barriers to access of primary healthcare by immigrant populations in Canada: A literature review', *Journal of Immigrant and Minority Health*, 18(6), pp. 1522–1540. doi:10.1007/s10903-015-0276-z.

[3] Tsoh, J.Y. *et al.* (2016) 'Healthcare communication barriers and self-rated health in older Chinese American immigrants', *Journal of Community Health*, 41(4), pp. 741–752. doi:10.1007/s10900-015-0148-4.

[4] Lee, J., Kim, N. and Su, M. (2021) 'Immigrant and International College Students' learning gaps: Improving academic and sociocultural readiness for career and graduate/professional education', *International Journal of Educational Research Open*, 2, p. 100047. doi:10.1016/j.ijedro.2021.100047.