Project AquiLá: Community-engaged planning to explore the relationship between culture and health

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ABSTRACT

Background: Elements of charrette planning were employed to develop and examine the relationship between transnationalism, culture and health.

Objective: This paper describes the partnership, the first two stages of the planning charrette and lessons learned.

Methods: During charrete planning phase 1 we collected data thought Social Network Interviews (n=58), Cultural conversations (n=88) and Photovoice (n=9). In the second phase we performed 5 charrette planning meetings. Data was synthesized by the planning team.

Lessons Learned: The issue centered focus facilitated trust among partners. The holistic, iterative process to planning and interpreting preliminary data provided a deeper understanding of the issues under investigation. Community partners at the table held us accountable to the communities we were studying and infused an undercurrent of social justice in our work.

Conclusion: There are advantages in employing a community engaged transdisciplinary team-based approach to the study of transnationalism, culture and health.

KEYWORDS: Charrette planning, community partnerships, culture, health, transnationalism, Dominicans, Brazilians

Immigrant status has been found to be protective for health, from birthing outcomes to disease mortality [1-3] and disease mortality [4]; however these protections fade dramatically over time and across generational status [5]. Research has implicated the process of acculturation as an important determinant of declining health among immigrants [6-8]. However, cultural explanations have been criticized for neglecting both the social and historical context in which immigrants are situated in U.S. society [9]. Because culture operates at different levels, a more complex, contextualized understanding of cultural factors influencing the health and wellbeing of immigrants is needed.

A community-academic partnership was initially established, with planning grant funding from the Office of Behavioral and Social Sciences Research (OBSSR) and support from the National Institute on Minority Health and Health Disparities (NIMHD) to develop a multi-level approach for measuring the relationship between culture and immigrant health. Charette, a planning approach, which is designed to engage diverse stakeholders in community change initiatives and to combine the knowledge generated from diverse perspectives to generate novel and multi-faceted solutions, was identified by the university researchers as the proposed planning approach [10]. Of note, the approach, although endorsed by community partners was conceptualized by researchers from three institutions. Although the project did not start as a community driven endeavor, overtime, as the partnership developed, decision-making and leadership was shared by community leaders and researchers. This paper describes the partnership, the first two stages of the planning charrette and lessons learned.

Project AquiLá

AquiLá, (a play on the Portuguese words "aqui" and "lá", meaning, here and there, respectively) is a community academic partnership that employed a data-driven planning process rooted in charrette to 1) explore conceptualizations of culture and the mechanisms by which culture impacts health; 2) identify strategies for measuring aspects of culture at multiple levels; and 3) develop a method for collecting data on culture and health that integrates our emergent understandings about culture and immigrant health.

Culture and Transnationalism

Popular definitions of culture developed by anthropologists have emphasized different dimensions of culture, including traditions and customs [11], webs of meaning [12], cultural cognition [13], and tools for the ecological adaptation of groups [14]. While definitions of culture differ in the cultural dimensions emphasized, there is some consensus among scholars that culture is *learned* and *shared*, providing a *guide* for societal life. Transnationalism further complicates the study of culture, posing clear challenges to health researchers. Transnationalism entails the formal and informal social, cultural and religious practices connecting people from two or more countries [15]. Regardless of structure or frequency of interaction across borders, immigrant "transnational social fields" [16, 17] offer opportunities to exchange information and resources.

Bronfenbrenner's ecological systems model for understanding human development provides a useful framework, facilitating a multi-level understanding of the impacts of culture on health that includes transnationalism. The model delineates how individual health and well-being is embedded within nested systems that range

from the micro-level factors most immediate to a person to macro-level factors [18]. Culture is maintained and reproduced at the individual, interpersonal, community, and societal levels. Individuals live in communities that are influenced by broader societal norms in both sending and receiving countries [15, 19, 20]. These interactions frequently occur in person or in virtual space, as information technology has made it easier for immigrant communities to maintain close ties with sending countries [15, 21-24]. Figure 1 illustrates individuals operating between two contexts, representing how they may operate in two ecological systems and how behaviors and practices are influenced by social networks that span boarders [20, 25]. Furthermore, they are actively engaged in communities that are influenced by broader societal norms in both sending and receiving countries [15, 19, 20].

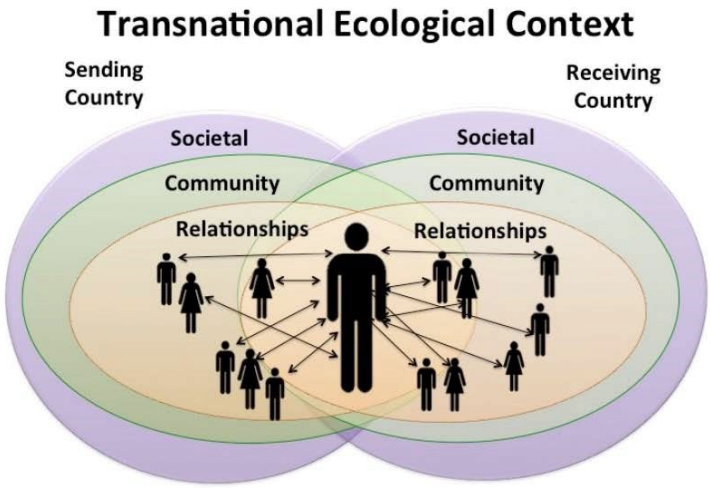

Figure 1: Transnational Ecological Context

This model informed our thinking and shaped our approach to approach to data collection and planning.

The Partnership

The partnership included three Universities: University of Massachusetts Boston (UMB), Tufts University and Boston University and two community Organizations: Brazilian Worker Center (BWC) and Dominican Development Center (DDC). It began with two community based participatory researchers meeting to discuss a potential collaboration, one from Tufts and one from UMB. As the researchers explored synergy in their work, they engaged a third UMB researcher with shared interests, in immigrant health and health equity. The Tufts researcher had an ongoing partnership with the Dominican Development Center, which involved a workforce development grant as well as a university funded grant to examine gentrification and health, which was conceptualized and written in response to DDC concerns related to affordable housing and displacement.

The UMB research had a longstanding partnership with the Brazilian Worker Center, which involved multiple projects focused on the occupational health and safety among Brazilian immigrants. In addition, the director of the Brazilian Worker Center had an adjunct appointment at UMB. The DDC and BWC directors both agreed to engage in the planning grant and provided letters of support. The partners also had a preexisting relationship, collaborating on a number of community organizing initiatives including the Domestic Worker Bill of Rights in Massachusetts.

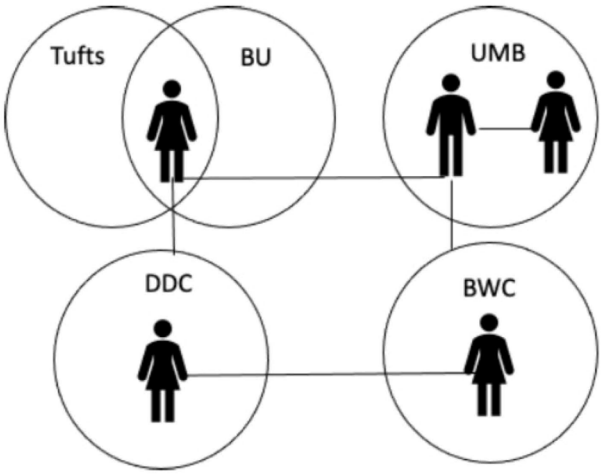

Figure 2: AquiLá Partnership

Upon notification of award the collective reconvened to review the aims and scope. At that time, we called ourselves the transnationalism and health project. We hired students and identified DDC staff to support the work. Both organizations were provided with consultancies to support their activities associated with the grant. We also brainstormed a new name for the group together. Initially, we considered Aqui-Alla (here and there in Spanish), but it was taken by a local Dominican television show, as such, we used the Portuguese translation and became Project AquiLá. Our logo, Figure 3 was designed by a local community member known to both the DDC and the Tufts researcher from their previous collaboration. Of note, the Tufts researcher transitioned to BU during the study, however staff and students remained at Tufts.

Figure 3: AquiLá Logo

As a collective, we are community activists and academic researchers from the fields of social work, anthropology, public health and sociology. We carry multiple identities; but are all were people of color, Dominican, Puerto Rican, African American, and Brazilian. We share a common goal of advancing immigrant health and health equity and, as such, approached planning with a critical lens and a focus on elevating community assets.

Planning Methods

We employed a charrette planning approach. Charrette planning involves three key phases: 1) Research, Education and Charrette Preparation; 2) Charrette; and 3) Plan Implementation [10, 26]. Charrette preparation involves the collection of data to inform the planning process, followed by a series of critical discussions each informing the next and leading to the development of a plan, which can then be implemented [26, 27]. We describe phases 1 and 2 in detail as well as lessons learned. Community partners

were involved in all aspects of the work including protocol development, data collection, analyses and dissemination.

Charette Planning Phase 1: Data Collection

This phase was approved by the Boston University Charles River Campus Institutional Review Board (IRB), the Tufts University IRB, and the University of Massachusetts, Boston IRB. Mixed methods were employed to collect data on cultural processes operating at the individual, social network, and broader societal level.

Methods. Methods included cultural conversations, egocentric social network interviews using network visualizations and photovoice. Cultural conversations are reflective and unstructured group discussions steeped in critical pedagogy, whereby participants are encouraged to challenge dominant narratives [28-30]. Conversations were co-facilitated by community partners and researchers. Groups explored culture, its meaning and its relationship to health. They then explored the impact of immigration on culture and health.

Social Network Interviews (SNIs) were conducted concurrently with cultural conversations and photovoice sessions. Social network analysis is the study of the ties, and pattern of ties, that link social actors [31, 32]. Participants were asked to freely list 30 people with whom they had some contact in the past two years. They provided basic socio-demographic information for each of their network members and evaluated all possible ties among the people listed. The participants' responses about ties and demographic characteristics can be used in two ways. First, the social network data can be used to quantitative assess patterns in the structure and composition of people's networks. Second, with Egonet, we visualized the social network data in interactive network maps. The interviewer used this network map to prompt participants to discuss

their own perspectives on the structure and composition of their network, to explore notable patterns about their social environment and the network impact on their health and health behaviors.

Photovoice is a participatory research method that helps to promote critical dialogue and knowledge about personal and community issues through group discussions and photographs, enabling participants to reflect on their community's strengths and concerns [33, 34].

Recruitment. Snowball sampling was used to recruit participants, drawing on the ties of our community partners. The project was announced via local media outlets, English for Speakers of Other Languages (ESOL) and citizenship classes, local immigrant-owned businesses, religious institutions, the Brazilian and Dominican Consulates, and civic organizations. All participants were first generation immigrants; however, we distinguish between first generation and Generation 1.5. Generation 1.5 are immigrants who immigrated in late childhood or adolescence. Studies to date indicate that their experiences differ from those of first and second generation immigrants [35, 36].

Phase 2 Data Analysis

Transcripts from the Cultural Conversations were analyzed with NVIVO® software for qualitative analysis. The analysis was conducted in parallel for Dominicans and Brazilians. Transcripts were generated for each group and a sample was systematically coded by two bilingual researchers. Partners then met to compare categories and identify key themes. Using the themes identified, which were similar to the cultural conversation guide, a codebook with parent nodes was developed and applied to all groups.

SNIs were recorded and transcribed in the language they were collected (Portuguese, Spanish or English). Files were then uploaded to NVIVO®. Codebooks were also developed as described above. The Brazilian codebook was applied to a sample (n=5) of the Dominican interviews and additional themes were documented. Researchers next met to reconcile coding and identify additional themes. The codebook was revised and then applied to the Dominican sample.

Photovoice groups met over two sessions of about 1.5 hours and stayed connected electronically with the facilitator between sessions. During Session 1, participants were trained in photovoice procedures and discussed the photovoice topic *culture and health in the context of immigration*, focusing specifically on their living and social environments. The researchers prepared a slide show with the photographs for Session 2. During Session 2 participants described their five favorite photographs. Groups reflected on the photographs using the *SHOWeD* framework [37]. After the descriptions and reflections were completed, the group discussed overarching themes, selected final photos, and constructed a narrative based on the selected photographs. A summary report was prepared by partners for the charrette.

Charette Planning Phase 2: Charette

The team met after each analysis to interpret and compare project results for both Dominicans and Brazilians. Each investigator brought their conceptual and theoretical lenses to the collaborative analysis. Based on the themes that emerged, a diverse group of six scholars and practitioners was identified and recruited to take part in the charrette planning dialogues with the core planning team. While the charrette participants spanned a range of disciplinary areas, all had expertise in immigration, culture, and/or health. Among the areas of expertise that informed the charrette

discussions were patient-centered outcomes research, religion and faith practices, risk and protective factors for health, race and racialization of immigrants, social networks of economic migrants, measurement of culture, and mental health. Charrette sessions were structured so that the core planning team presented themes, participants then provided feedback in the context of their own research, and all engaged in dialogue to explore ways to build on the findings and determine next steps in the planning process.

We conducted a total of five charrette sessions, each informing the next. Sessions were taped and transcribed. Data was managed using NVIVO®. A thematic analysis was completed between sessions, with data used to inform the following session. At the culmination of the charrette the core planning team came together for an intensive two-day retreat to synthesize charrette findings and develop a strategy for the pilot study. During the retreat we discussed and interpreted the findings and their implications. This included reconciling differences in meanings or codes between the Dominican and Brazilian cultural conversations, as well as exploring variation associated with other demographic factors (such as age and occupation) and identifying methods to capture concepts relevant to each ethnic group.

Results

Charette Planning Phase 1: Data Collection

Figure 4 illustrates the data collection schedule.

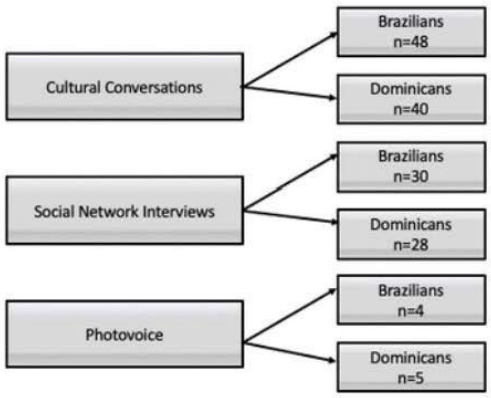

Figure 4: Data Collection Schedule

Cultural Conversations

Dominican (n=40) and Brazilian (n=48) immigrants living in the greater Boston area took part in 10 cultural conversations, 5 each for Brazilians and Dominicans. Participants were grouped based on key socio-demographic and occupational characteristics identified by community partners. Prompts were identical across groups in order to capture differing perspectives on shared themes. Sessions lasted an average of two hours. Table 1 describes the characteristics of participants in each conversation.

[Place Table 1: Cultural conversation participants approximately here]

A summary of cultural conversation themes was prepared by partners for the charrette. Salient themes from the cultural conversations can be seen in table 2

[insert table 2: Cultural conversation themes approximately here] [28, 29]

Social Network Interviews

Egocentric network visualizations and social network interviews (SNIs) were conducted with Brazilians (n=30) and Dominicans (n=28). Key themes of the interviews are shown in table 3.

Photovoice

We employed photovoice to explore *culture and health in the context of immigration*, focusing specifically on living and social environments. Nine individuals (4 Brazilian and 5 Dominican) participated in two separate photovoice groups. Two very different stories emerged during the photovoice sessions.

Figure 5: Brazilian (left) and Dominican (right) Photovoice

Charette Phase 2: Charrette

An important conclusion from the charette planning process was that our project's social network approach was a particularly promising way to collect data that illuminated cultural processes at multiple levels. Therefore, as a starting point to for the design of the pilot to examine cultural processes associated with mental health, stress

and distress, we decided to systematically assess the distribution of cultural knowledge within social networks and to determine if we could relate *networked culture* to particular health outcomes. To assess cultural knowledge we adopted cultural domain analysis methods developed by cognitive anthropologists [38]. Cultural domain analysis (CDA) includes a suite of methods intended to elicit the content of specific cultural domains, how knowledge of a given domain is structured, and assess the extent to which members of a culture share knowledge about a cultural domain [38, 39]. Essentially, CDA is used to understand how people in a group think about things that somehow go together. The goal is to understand differences in how people in different cultures (or subcultures) view things in the world. CDA provides insight into the shared cultural knowledge that underlies people's choices, behavior, and beliefs. It is often difficult for people to articulate the cultural knowledge that influences their routine actions, and many are not explicitly aware of the particular perspectives on the world they may share with other members of their cultural groups. The CDA process begins with the identification of a cultural domain that is relevant to a cultural group. Overall, we found the most salient health concerns expressed by both Dominicans and Brazilians were related to mental health, particularly stress and distress. Based on the results of the planning process, two cultural domains were identified for further study: 1) a domain of leisure activities following Dressler and colleagues' (2005) work on cultural consonance, and 2) a domain of "typical American" traits. Both domains emerged as salient for both Brazilians and Dominicans, who in contrasting their experiences in their home countries to the U.S. expressed frustrations about the stresses of work and constraints on their time, as well as aspects of American culture that were significantly different from their own. We determined that both domains would enable

us to examine significant health impacts of immigrant and transnational experiences.

Lessons Learned

The lessons learned during the implementation of a transdisciplinary data-driven planning process are highlighted in the context of *the principles of transdisciplinarity* [40]. These are: 1) issue- or problem-centered, 2) holistic research approach, 3) transcendence, 4) emergence, 5) innovation, and 6) flexibility.

Issue-centered focus

Culture and health among transnational immigrants grounded our work. From the outset it was clear that this focus required disciplinary contributions from both biomedical and social sciences. In this regard, our partner's differences in disciplinary training and methodological expertise were assets rather than liabilities. As is characteristic of transdisciplinary research, our focus on transnational immigrant health reflected our sensitivity to real-world applications, particularly our commitment to addressing ethnic and racial health disparities. This commitment was fueled by our past work with the Dominican Development Center and the Brazilian Worker Center, both organizations who identified health inequities as a priority in their own advocacy work. Therefore, there was a deep commitment to the topic and the process, which inspired us to fully engage with one another.

The issue-centered focus facilitated trust among partners as we realized each other's commitment, which we kept even in times of uncertainty. For example, the initial protocol involved the collection of mixed methods data with a small sample of 30 Brazilians and 30 Dominicans. Early on community partners expressed concern that such a small sample would limit our understanding of these two diverse communities and our ability to thoroughly plan the development of a measure of culture. We, thus,

expanded the sample for cultural conversations from 10 to 40 in each group, and for social network interviews from 10 to 30. This increase provided rich data for our planning process; however, it required substantially more resources and time than we anticipated and involved a larger role for our community partners than was initially planned. Our issue-centered focus facilitated our ability to stay the course. At the same time, our partners' responsiveness to the evolving needs of the project was consistent with the transdisciplinary principle of flexibility.

Holistic research approach

Multiple aspects of our project followed the *holistic* research approach. First, our partners contributed knowledge that informed the biomedical, social, cultural, and public health dimensions of the project. Second, our project's ecological conceptual framework spanning individual, community, and macro-structural factors attended to the multifaceted, multilevel nature of transnational immigrant health. Finally, we approached the work with an openness to multiple research methods that crossed simplistic qualitative versus quantitative methodological divides. In short, our mixed-methods project was holistic in terms of the disciplinary tools and techniques as well as diverse forms of knowing we brought to bear on the study of transnational immigrant health. This overall *holistic* approach was implemented in the spirit of knowledge sharing and of co-learning.

In addition, our holistic, iterative process to planning and interpreting preliminary data provided a deeper understanding of the issues under investigation. It allowed for an unexpected opportunity for student training in applied transdisciplinary team science, as our diverse partnership composition and issue-centered focus attracted to the project undergraduate and graduate students from diverse disciplinary

backgrounds. We hosted seventeen student researchers during the project, thirteen of whom were 1st, 1.5, and 2nd generation immigrants and all of whom were fluent in Spanish and/or Portuguese. Their energy and interest in applied immigrant health research expedited data collection and transcription. Our project also drew interest from international researchers. Our Brazilian partner received 5 scholars from Brazil. We were also invited to the Dominican Republic to share the project with social work and sociology scholars. Our community partners and students travelled to conferences in the U.S. and Europe to present study findings.

Flexibility

The planning grant mechanism coupled with the transdisciplinary approach afforded us a great deal of *flexibility*. Our project was foundationally based on openness and willingness to hearing and testing one another's ideas and exploring new and innovative strategies together. When we began the project, we did not know what multilevel approach to studying the relationship between culture and health we would choose. Rather, the purpose of the planning process was to develop a multilevel approach starting from some basic principles and building the specifics along the way. By necessity the project had to be flexible, iterative, and fiercely open to multiple possibilities.

Furthermore, when things did not go quite as intended, it was easy for the partners to bounce back and identify alternative strategies. For example, although we were quite successful in recruiting participants and managing multilingual data, we experienced challenges engaging a transdisciplinary partnership beyond the core investigators and community partners. The charrette methodology called for a series of critical dialogues over time that included the core planning group along with a group of

experts. We aimed to collaborate with a diverse group of scholars and practitioners who would all participate throughout the project, but coordinating the expert partners was more difficult than anticipated. Most charrette participants were not able to attend all meetings, and in some cases the charrettes consisted of core partners and only one expert discussant. As a result, the expert participants were less integrated over time.

Challenges

We identified two key reasons that inhibited our ability to integrate the expert charette partners. First, we did not recruit and involve expert charrette participants from the onset of the project; instead, we let the data guide our selection of scholars and practitioners. Had we written charrette participants into the grant, they would have been able to dedicate more of their busy time to the project. Second, it became evident early on that institutional boundaries were limiting with respect to identifying scholars and practitioners. We found this particularly to be the case in our efforts to identify and engage experts and practitioners in the humanities. Given our focus on health implications of transnationalism, networks, and culture, we sought experts across the U.S. and abroad. Although technology facilitated our planning process, we did not have enough resources to fully engage a planning expert charette partner during the whole project.

Uncertainty and the emergence of new ideas

There was a degree of uncertainty associated with the planning process, because we let the data and conversations with the charrette participants and community partners largely guide it. On the other hand, this uncertainty allowed us to remain focused on the issues, giving us space to think creatively, and facilitating the *emergence* of new ideas, concepts, and approaches. For example, our project drew from the field of social

network analysis (SNA) – an interdisciplinary field in itself – and communicated with social network experts. A key concept within the field of SNA is betweeness centrality [48], which is a formal measure of brokerage within a social network. In our discussions, we explored the concept of betweeness metaphorically to consider the potential impacts on health of bridging host and home country obligations, relationships, and commitments. The SNA concept of betweeness was analogically integrated with insights about the emotional and interpersonal experiences of immigration that emerged during cultural conversations and interviews. In this way, our partnership developed new ways of thinking about the mechanisms through which transnationalism can impact immigrant health. In another example, our use of cultural conversations to collect data about culture and health emerged through our collective efforts to reconcile our partner's multiple methodological commitments and visions. We were successful in creating a team environment and dynamic in which we were able to learn from each other and transform our thinking overtime. An important *innovation* of our work is that we brought together elements of successful intervention and applied research modalities, such as community-based participatory research and popular education [41], and were able to integrate them in the context of basic research frameworks.

Conclusions

The factors that influence the health and well-being of immigrants are complex, particularly in the case of transnationals whose health and well-being is influenced by contextual factors in and between receiving and sending communities. The issue-centered focus associated with transdisciplinary team science grounded the planning team and facilitated a shared commitment, trust and mutual respect for one another and

the values diverse perspectives bring to the research process. Moreover, community members at the table held us accountable to the communities we were studying and infused an undercurrent of social justice in our work.

We found great advantages in employing a community engaged transdisciplinary team-based approach to the study of culture in the context of transnationalism and immigrant health. However, we would be remiss not to recognize the advantage of having a funded planning grant that created space for us to unite across institutional and departmental boundaries and to engage community partners as well as an international group of experts in dialogues. This underscores the need for infrastructure to support multi-institutional community engaged partnerships.

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Table 1: Cultural conversation participants

Cultural Conversations			
Brazilian		**Dominicans**	
Characteristics	**n**	**Characteristics**	**n**
Professionals	8	Professionals	6
1.5 Generation	3	1.5 Generation	4
Domestic Workers	7	Low wage workers	10
Construction Workers	8	Men's group	8
Elders (60+)	22	Elders	12
Total	**48**	Total	**40**

Table 2: Cultural conversation themes [28, 29]

Brazilians	**Dominicans**
Religion: Important to both communities alike	
Hospitality: common value in both communities.	
Welcoming warmth, (perceived Americans as cold and lacking spontaneity)	A la orden "at your service"
Perceived U.S. dietary practices to be harmful.	
Importance of self-care and grooming for mental health and wellbeing	
Stress related to immigration status and lack of documentation, work-life balance.	Stress related to racial discrimination, social isolation, work-life balance.
Need for maintaining cultural ties.	
Focus on cultural adaptation and adjustment	
Valued the ability to adapt to practices and relationships developed in the U.S. and emphasized the importance of learning English for adaptation.	Grappled with changing cultural norms among Dominicans in the U.S. and in the Dominican Republic (D.R.)

Table 3: Social network themes [28, 29]

Brazilians	Dominicans
Tended to have more racially and ethnically diverse social networks than Dominicans. Strong emotional closeness to others cut across ethnic groups.	Most close relationships were primarily with family, also co-ethnics. Dominicans' networks comprised a strong core of interconnected co-ethnics spanning the U.S. and the D.R.
We found a strong value placed on the ability to flexibly negotiate institutional barriers and seek diverse contacts, in particular for undocumented Brazilians.	Dominicans were all either permanent residents or U.S. citizens.
Brazilians were more likely to be undocumented.	Had a greater number of strong, transnational ties than Brazilians.
Brazilians were more likely to express a desire to integrate into American society, learn English, and develop diverse relationships as a way to better blend in and deflect scrutiny of their immigrant status. The lack of documentation of many of our Brazilian participants may explain fewer transnational ties among them.	These transnational contacts also provided health advice and support – particularly for older Dominicans – underscoring the need to better understand how transnational ties affect the health of immigrants.

Table 4: Photovoice themes [28, 29]

Brazilian	Dominican
Cell phone: Cultural life line (constant communication with family)	A memorial: reminder of community violence.
Church service, community, a connection with Brazil -	Individual wearing his pants low: A stressor for a newly immigrated young man who reported feeling pressure to dress a certain way.
Cubicle: Hard work to achieve high status job in the U.S.	Sancocho: A traditional Dominican dish. In the D.R. a symbol of community, neighbors and family get togethers, in the US, people are less likely to stop by. Perhaps they returned home to the D.R., settled in another community or are busy working; there is little time to socialize and few opportunities to share a meal with family. Participants described social isolation as well as depression and overeating that result when you cook too much and are alone.
You must suffer, through hard work and separation from your family, to live in the U.S. alone as an immigrant to appreciate leisure.	Preserving traditional Dominican practices is protective for health.