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Sexual Migration and HIV Risk in a Sample of Brazilian, Colombian and Dominican Immigrant MSM Living in New York City

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Abstract

We examined motivations for migration to the United States (US) among 482 Brazilian, Colombian, and Dominican men who have sex with men (MSM). Participants' most common reason for migration was to improve their financial situation (49%), followed by sexual migration in order to affirm their sexual orientation (40%). Fewer endorsed sexual migration motivated by avoiding persecution due to being gay (13%). We conducted further analyses among 276 participants who migrated after age 15 and were HIV-negative at the time of migration. We hypothesized that sexual migration would be associated with greater likelihood of HIV acquisition post-migration. Hierarchical logistic regression analysis indicated that sexual migration motivated by avoiding persecution due to being gay was associated with increased odds of contracting HIV after arrival in the US whereas sexual migration to lead a gay life was not. Our findings highlight the importance of addressing the negative impact of anti-gay discrimination in countries of origin.

Keywords

Sexual migration; Sexual orientation discrimination; HIV; MSM; Latino/Hispanic

Introduction

Certain social conditions have been acknowledged as motivations for migration, such as the desire to have greater economic or educational opportunities, to be with family members, and to escape political unrest [1–6]. However, for some individuals who migrate, factors related to their identity may also play a role. Carrillo proposed the concept of sexual migration to describe such factors specific to sexual minority individuals and defined the term as “the international relocation motivated fully or partially by the sexuality of those who migrate” (2004, p. 59). For lesbian, gay, bisexual, and transgender (LGBT) individuals

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Compliance with Ethical Standards

Conflict of interest The authors declare that they have no conflict of interest.

Ethical Approval The research conducted for this study was approved by The George Washington University IRB and all participants were consented before enrolling in the study.

discrimination, oppression, and persecution due to sexual orientation are impetuses for sexual migration [2, 5–10]. Furthermore, in Latin America and the Caribbean, men who have sex with men (MSM) often migrate to larger cities in their own countries and in the United States (US) hoping to live a fuller gay life, less encumbered by discrimination [1, 5, 7–10].

Latino immigrant MSM living in the US are a diverse group, which in turn can result in significant variance in attitudes and behaviors. In examining sexual migrations, such differences may be particularly important, as the climate for MSM differs substantially among Latin American countries. For example, Brazil and Colombia promote LGBT equality through different laws and policies (e.g., recognize same sex relationships) [10, 11]. However, despite legal protections in Brazil and Colombia, MSM continue to experience discrimination or violence due to their sexual orientation [9, 11]. In Brazil, a study reported that 60% of LGBT people had experienced some form of discrimination or violence due to their sexual orientation [11]. In Colombia, where the entire population has experienced decades of civil unrest, MSM noted gay discrimination as one of the main reasons leading to their internal displacement [9]. In contrast, although homosexuality itself is not illegal in the Dominican Republic, homophobia is strongly rooted in society. Same-sex marriage is not legally recognized, and there are no laws prohibiting discrimination against LGBT people [12, 13]. Studies have found high levels of discrimination and prejudice toward MSM in the Dominican Republic, with economic and social consequences that may compel individuals to engage in sex work or may result in greater vulnerability to HIV [6, 13].

For some Latino MSM the US can offer a place where they can improve their financial situation, be with their family and express their sexuality with more freedom and less discrimination [2, 5, 7]. Although migration to another country does not directly result in HIV risk, the often stressful and potentially traumatic circumstances leading to, during, or after migration may create additional exposure or vulnerabilities (i.e., unprotected sex, increased number of partners, language barriers, drug use) that place Latino MSM at higher risk for acquisition of HIV post-immigration [1, 14–20]. For example, Brazilian, Colombian, and Dominican MSM noted that because of their inability to speak English, lack of familiarity with US culture, and insecure financial situation, they often sought anonymous sexual encounters in public venues (e.g., parks, sex cabins) when they first arrived in the US [5]. Similarly another study found that sociocultural (e.g., stigma, lower perception of risk) and structural barriers (e.g., undocumented status, language barriers, access to healthcare) increased the likelihood of acquisition of HIV among Latino immigrants post-immigration to the US [21].

Until 2010 the US had an HIV ban on travel and immigration, which stated HIV was a disease of public health significance requiring immigrants be tested for HIV; entry to the US could be denied to individuals who were HIV-positive [22]. This law assumed that immigrants might be bearers of diseases, such as HIV. For this reason, the law limits educational and employment opportunities for people living with HIV and could discourage individuals from seeking HIV testing or treatment for fear of not being allowed to enter the US or being deported after immigrating [22]. However, the majority of Latino immigrants come from countries with low prevalence of HIV (i.e., Brazil, Colombia) [23–26], yet they

have increased probability for acquisition of HIV post-immigration, particularly in cities with higher HIV prevalence such as New York City (NYC) [20]. A study conducted with data from NYC found that 61% of foreign-born immigrants appeared to acquire HIV in the US, and MSM were more likely to become HIV-positive in the US [20]. Among immigrants who acquire HIV, Latino immigrants were more likely to become infected in the US after migrating (i.e., 75% of South American, 68% of Central American, and 65% of Caribbean) compared to immigrants from other regions (e.g., 60% of Europeans, 34% of Africans).

In a previous qualitative study examining the migration process of Brazilian, Colombian, and Dominican MSM, we found both positive (e.g., to live a more fully realized gay life in the US) and negative (e.g., to escape discrimination or HIV-related stigma) factors related to sexual orientation that drove individuals to migrate to the US [5]. Regardless of motivation, participants reported finding greater sexual freedom shortly after arriving in the US, which may have also increased risk of HIV.

In the present study, we extended earlier qualitative research on reasons for migration to the US among Brazilian, Colombian, and Dominican MSM [5] by examining this topic using quantitative methods in a different sample. We investigated the reasons Brazilian, Colombian, and Dominican MSM reported for migrating to the US, and the association of sexual migration with HIV acquisition in a subset of this sample. Because cultural and societal conditions that may compel individuals to migrate are likely to vary across countries of origin, we first hypothesized that there would be differing reasons for migration by nationality. Second, we hypothesized that sexual migration (i.e., migration to avoid sexuality-related persecution or seek affirmation) would be associated with greater odds of HIV acquisition after migration, compared to migration for other reasons. We further hypothesized that the two potential underlying reasons used to defined sexual migration would be independently associated with HIV acquisition after migration.

Methods

Participants and Measures

We used data from a larger cross-sectional study that examined the role of contextual factors on sexual risk among 482 Latino MSM who migrated to NYC [16]. Procedures were approved by the University IRB [16]. Participants were recruited between March and August 2006, and were eligible to complete the questionnaire if they: (1) were born in Brazil, Colombia, or Dominican Republic, (2) resided in the New York City metropolitan area, (3) were at least 18 years of age, (4) had sex in the last 6 months, and (5) had sex with men. Participants were recruited using flyers distributed in gay venues, community centers and Latino cultural events in New York and Newark, New Jersey. The survey was administered in Spanish, Portuguese, or English, depending on the participant's preference, using an audio-enhanced computerized survey and touch-screen computers. More detailed information about the procedures of this study can be found in Zea et al. [16].

Data included socio-demographic characteristics (i.e., age, country of birth, income, and education), age of migration, and sexual orientation (i.e., In terms of sexual orientation, do you consider yourself: gay, bisexual, straight/heterosexual, [a] man who has sex with men,

on the “downlow,” transgender or transsexual, transvestite). The term “man who has sex with men” was included as a response option because some Latino men did not identify as “gay” or “bisexual” but did have same-sex partners.

Reasons for migration to the US were measured with 10 “yes” (1) or “no” (0) questions (e.g., “To be with family or friends,” “To improve financial situation [to find work]”), which were not mutually exclusive. For this study, we defined sexual migration [1] as migration motivated by two potential underlying reasons: (1) to affirm their sexual orientation and/or (2) to avoid persecution due to their sexual orientation. The first sexual migration motivation, to affirm their sexual orientation, was operationalized using two statements: (1) “to live my homosexual life more openly” and/or (2) “to live with a lover or boyfriend”. The second sexual migration motivation, to avoid persecution, was operationalized as, “to escape violence or persecution for being gay”. Participants self-reported their HIV-status (i.e., negative, positive, or unknown) and the year in which they first tested HIV-positive. We estimated whether participants contracted HIV prior or post-migration by subtracting year of migration to the US from the year in which participants tested HIV-positive.

Analysis

To test differences in reason for migration to the US among Brazilian, Colombian and Dominican MSM ($n = 482$), chi-squares and ANOVAs were calculated (Hypothesis 1). We performed a hierarchical logistic regression analysis to examine Hypothesis 2 ($n = 276$), which examined the association between sexual migration (i.e., motivations related to affirming sexual orientation and/or related to avoiding negative sexual consequences associated with being gay) and HIV-status after controlling for demographic characteristics, years living in the US and country of birth. For Hypothesis 2 only, we excluded participants who were HIV-positive at the time of migration, reported not knowing their HIV-status, or were younger than 15 years of age when they migrated to the US (because younger individuals’ migration typically stems from their parents’ decisions rather than from their own volition). Participants who reported being HIV-unknown were excluded from the analysis on the basis of their beliefs about their status. Years living in the US were calculated by subtracting the age of migration from the participants’ age reported in the questionnaire. Income in the US was dichotomized as (0) \leq \$1600 per month and (1) $>$ \$1600 per month because of the low number of participants in some income categories. Data were analyzed using IBM/SPSS (v.23).

Results

Demographic characteristics, age of migration, years living in the US, sexual orientation and HIV-status are presented in Table 1. The mean age of participants was 36 years ($SD \pm 9.5$). This sample was highly educated, with half having at least some college or a bachelor’s degree. More than half of the participants reported being employed part-time or full-time, but the majority of them made less than \$1600 per month (58%). Dominican MSM were significantly younger than Brazilian and Colombian MSM ($F_{(2,479)} = 11.53, p < 0.001$) and were the group that migrated to the US at a younger age ($F_{(2,479)} = 37.98, p < 0.0001$). There were no significant differences in HIV-serostatus by country of origin [$\chi^2 (4)$,

$p=0.27$] (Table 1). We estimated the year in which participants seroconverted by subtracting year of migration to the US from the year in which participants tested HIV-positive. Using this estimate, among those participants who reported being HIV-positive ($n = 129$), 22% seroconverted in their home country and 78% seroconverted after migrating to the US.

The most common reason for migration to the US was to improve one's financial situation (49%), followed by sexual migration motivated to affirm one's sexual orientation (40%) (Table 2). Sexual migration motivated to avoid the negative consequences of their sexual orientation was less common (13%). All participants who reported migrating to avoid persecution (13%) also reported migrating to affirm their sexual orientation. Although we had expected varied motivations for migration by nationality (Hypothesis 1), we did not find widespread differences in the reasons given. The major difference in migration patterns was that Dominican participants (58%) were more likely to have migrated with their families than Brazilian (24%) and Colombian (15%) MSM. This is consistent with the finding that they came at a younger age. Another significant difference was that Colombian participants reported seeking political asylum (15%) as a reason for migration.

To test Hypothesis 2, that sexual migration would be associated with greater likelihood of current HIV-positive status, we performed a hierarchical logistic regression analysis (Table 3). In step 1, we included two variables reflecting characteristics of the migration experience, years living in the US, and country of origin, as well as demographic characteristics (i.e., age, income, and education). The model at this step was significant [$-2 LL = 230.00$, $X^2(9) = 86.83$, $p < 0.0001$]. Findings indicated that those participants with low incomes (OR 2.22, 95% CI 1.06–4.66), and who had been living in the US for more years (OR 1.12, 95% CI 1.06–1.19) had an increased odds of being HIV-positive. In Step 2, we added the two types of reasons reflecting sexual migration. Participants could answer yes or no to each reason (*to avoid persecution* or *to affirm their sexual orientation*) or to both reasons because the questions were not mutually exclusive. With the addition of this step, the change in the -2 log likelihood was significant [$X^2(2) = 6.50$, $p = 0.03$], thus indicating that sexual migration contributed to the likelihood of contracting HIV.

Examination of the individual variables in the sexual migration set included in Step 2 indicated that those participants who migrated to avoid persecution had an increased odds (OR 3.35, 95% CI 1.25–8.97) of being HIV-positive than those who had not migrated for this reason (Table 3). This association was present regardless of country of birth, as evidenced by the nonsignificant interaction between country of birth and to avoid persecution [Wald (2) = 2.43, $p = 0.30$; model not shown]. In contrast, sexual migration motivated to affirm their sexual orientation was not significantly associated with HIV-status.

Because the two indicators of sexual migration were correlated ($\phi = 0.42$), we were concerned that multi-collinearity could be masking the impact of sexual migration to affirm one's identity. Therefore, we performed two separate multiple logistic regressions to examine whether migration to avoid sexuality-related persecution or seek affirmation were independently associated with HIV acquisition after migration controlling for demographic characteristics (i.e., age, income, and education), country of birth and time in the US (Table 4). The first regression model examined sexual migration to affirm their sexual orientation (n

= 276) and the second regression model examined sexual migration to avoid persecution (n = 276). These analyses confirmed that the motivation to avoid persecution was associated with HIV-status ($p = 0.01$), but the motivation to affirm their sexual orientation was not ($p = 0.40$). Furthermore, because all the participants who reported avoiding persecution (n = 40) also reported migrating to affirm their sexual orientation as a motivation, we performed a fourth multiple logistic regression analysis with those participants who only reported migrating to affirm their sexual orientation (n = 137) and included the motivation to avoid persecution as a predictor (model not shown). This analysis confirmed that the motivation to avoid persecution was associated with greater odds of acquisition of HIV after migration ($p = 0.02$).

Discussion

Using quantitative methods, we examined sexual migration in a sample of immigrant Latino MSM from Brazil, Colombia, and the Dominican Republic living in New York City. This paper extends previous research on sexual exile and migration that utilized qualitative methods [1, 2, 5–8]. We failed to find differences in sexual migration motivations in the three countries despite the differing legal and social conditions for LGBT individuals. Sexual migration motivated to affirm sexual orientation (“to live my homosexual life more openly” and/or “to live with a lover or boyfriend”) was common for all three sending countries. Sexual migration motivated by a desire to avoid persecution was reported less frequently, but also did not differ by country. Thus, MSM living in Brazil or Colombia, where there are legal protections for sexual minorities, were still motivated to move to the US to live more openly or to escape persecution in their home country for reasons related to their sexual orientation. As noted in our earlier qualitative study [5], the anonymity and opportunity afforded by a large gay-epicenter in a different country provides greater freedom for MSM to live a fuller gay life. The concerns about family expectations, social constraints or reputation in their home country can inhibit MSM individuals in revealing their sexual orientation.

NYC is recognized as a gay epicenter offering a space for Latino MSM to express their sexual orientation more openly. However, the experiences prior, during, and postmigration differs among Latino immigrant MSM impacting the learning process of social norms and living in a new country [5]. Previous qualitative research indicated that sexual migration to a large urban enclave, such as NYC, provided opportunities to be sexually active and adventurous [5]. Therefore, our second major research question was whether sexual migration would be associated with greater vulnerability to HIV acquisition. This hypothesis was partially supported: findings showed that controlling for age, income in the US, education, country of birth, and time in the US, sexual migration to avoid persecution contributed to the likelihood of attaining HIV-positive status after arrival in the US. Furthermore, this association was confirmed when it was examined independently of the motivation of migration to lead a more open gay life. Previous studies of Latino MSM living in the US have found that experiences of discrimination due to sexual orientation or to race/ethnicity were associated with poor health outcomes, such as depression [17–19] and sexual risk [27]. Studies of MSM in Brazil [11], Colombia [9], and the Dominican Republic [6, 12, 13] document exposure to violence and discrimination due to sexual orientation in the

sending countries, and our findings suggest that negative consequences of this violence are associated with individuals' health after migration.

In contrast, migration to lead a more open gay life was not related to the likelihood of contracting HIV after arrival in the US. This motivation reflects a more positive aspect of sexual migration, and it implies an acceptance of one's own sexuality and a desire to seek an affirming environment. In this case, migration may be a proactive step toward the individual's achieving a fuller realization of himself, which may also be related to better self-care. Furthermore the acceptance of one's own sexuality has been associated with well-being, better outcomes in mental health and engagement in healthcare [28, 29]. Further research is needed to examine the intersection between coming out and migration to another country.

Our findings have some limitations. Participants self-reported when they first tested HIV-positive, however, we do not have the information whether they got infected pre- or post-immigration except for those who tested positive prior to immigration to the US. For that reason participants who did not know their HIV-status were eliminated from the sample to test Hypothesis 2. We did not administer HIV tests to participants to confirm their HIV-serostatus, and the survey did not have questions about HIV testing behavior. In addition, we do not have longitudinal data on pre- and post-migration sexual behavior that would allow us to establish with certainty the relationship between sexual risk and the acquisition of HIV post-migration. Participants were selected by convenience, limiting the generalizability of our findings. Furthermore, given the diversity of culture within the Latino community, these findings may not apply to Latino immigrants from other countries. NYC is a diverse metropolitan area that has seen significant waves of immigration from Latin American countries, Dominican Republic being chief among them; whereas the largest group of Latino immigrants across the US comes from Mexico [30]. However, the relatively few significant differences in our findings between immigrants from the three countries sampled suggest our findings maybe generalizable to other Latino immigrants in the NYC metropolitan area. These findings may also not be applicable to Latino immigrants who migrated to other areas in the US. In addition to the sociocultural (e.g., stigma) and structural barriers (e.g., undocumented status, language barriers) their urban dwelling counterparts face, Latino immigrant MSMs who settle in rural areas also report feeling pronounced social isolation (e.g., small social support network, knowing few to no Latino immigrants who identified as a sexual minority) [31].

We should also note that until 2010, the US government considered HIV a communicable disease and grounds to deny entry to immigrants [32]. Immigrants and refugees who sought a resident visa were required to undergo a physical examination to determine their admissibility to the US. It is possible that our sample is self-selected in this respect as would-be Latino immigrants who were HIV positive were denied entry to the US or denied permanent residency if already in the US. However, we also did not assess participants' legal status. It is possible that participants obtained a waiver to enter the US (e.g. immigrants who have family already established in the US) or circumvented the immigration procedure altogether. Despite these limitations, our findings have important implications for immigrant MSM.

The current study expands existing literature on sexual migration and its consequences for HIV in a distinctive sample of Latino immigrant MSM in the US.

Moreover, findings show that the longer participants lived in the US, the more likely they were to become infected with HIV. There is a need for interventions to decrease discrimination based on sexual orientation among Latino MSM in the US and their sending countries. HIV-prevention programs targeting Latino immigrant MSM should take into account that this is a diverse group that can have different attitudes and behaviors toward HIV-risk and prevention. Existing HIV-prevention interventions could be adapted to meet the needs of this specific populations [33, 34]. Programs that provide HIV-testing, safe-sex skills-building workshops, and harm reduction services and increase access to Pre-Exposure Prophylaxis (PrEP) and Post Exposure Prophylaxis (PEP) among Latino immigrant MSM regardless of their legal status are needed. Future longitudinal research could examine how social and structural conditions in the home country influence migration. In addition, future research could also examine mediating factors (e.g. self-efficacy, self-esteem, sexual practices, future orientation, and social capital/networks) that ultimately affect HIV risk.

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Table 1
Sociodemographic characteristics, sexual orientation and HIV-status by country of origin

%	Brazilian (n = 146)	Colombian (n = 169)	Dominican (n = 167)	Total (n = 482)
Participants' age (mean, SD) *	37.5 (8.9)	38.2 (9.2)	33.6 (9.4)	36.4 (9.5)
Age of migration to the US (mean, SD) *	23.3 (11.5)	25.4 (9.2)	15.9 (10.5)	21.5 (11.2)
Time living in the USA (mean, SD) *	14.2 (11.3)	12.8 (9.3)	17.7 (10.9)	14.9 (10.7)
Monthly income *				
< \$1,600	97	95	86	278
> \$1600	49	74	81	204
Education **				
Less than high school	12	30	28	70
Completed high school/GED or vocational school	35	26	24	85
Some college	37	36	58	131
Completed college	47	46	35	128
Graduate school	15	31	22	68
Sexual orientation ^a				
Gay or homosexual *	126	148	130	404
Bisexual **	16	25	44	85
Man who has Sex with Men (MSM)	18	17	24	59
Straight or heterosexual	0	1	3	4
In the "down-low"	1	2	3	6
Transgender or transsexual	0	1	1	2
Transvestite	0	1	0	1
Current HIV status				
Positive	33	54	25	129
Negative	95	94	65	298
Unknown	42	109	16	55

^aSexual orientation categories are not mutually exclusive

* p < 0.05

1000 > d

1010 > d
**

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Table 2

Reasons for migration to the United States by country of origin

Frequency	Brazilian (n = 146)	Colombian (n = 169)	Dominican (n=167)	Total (n = 482)
To improve financial situation (to find work)***	59	103	74	236
To affirm sexual orientation	52	78	62	192
To study	52	63	62	177
Came with my family (not my decision)**	35	26	97	158
I came here as a tourist and decided to stay****	40	49	7	96
To be with family or friends***	6	21	40	67
To avoid persecution	15	29	18	62
To find political asylum***	4	25	8	37
To receive medical care	3	11	8	22

Reasons for migration to the US are not mutually exclusive

* p < 0.05

** p < 0.01

*** p < 0.001

Table 3

Logistic regression model examining whether migration to affirm their sexual orientation and to avoid persecution are associated with becoming HIV-positive after controlling for demographic characteristics, time living in US and country of origin

	Step 1			Step 2			Difference in -2 log likelihood
	-2 log likelihood	Overall model	n	-2 log likelihood	Overall model	Chi-square test	
n	230.00	X² (9) = 86.83****	276	223.50	X² (11) = 93.33****	X² (2) = 6.50*	
	Step 1			Step 2			
	B (SE) ^a	Odds ratio	95% CI	B (SE) ^a	Odds ratio	95% CI	
Intercept	-3.92(0.98)	-	-	-4.94 (1.04)	-	-	
Age	0.05 (0.03)	1.05	0.99-1.11	0.05 (0.03)	1.05	0.99-1.10	
Monthly income in the US (ref > \$1600)							
< \$1,600	-0.80(0.38)*	2.22	1.06-4.66	0.74 (0.38)	2.12	0.97-4.48	
Education (ref= Less than high school)							
Completed high school/GED or vocational school	-0.07 (0.53)	0.93	0.33-2.61	-0.29 (0.56)	0.75	0.25-2.23	
Some college	0.09 (0.53)	1.10	0.38-3.15	0.09 (0.55)	1.09	0.38-3.17	
Completed college	-0.28 (0.53)	0.76	0.27-2.14	-0.29 (0.54)	0.75	0.26-2.16	
Graduate school	-0.71 (0.68)	0.49	0.13-1.87	-0.74 (0.70)	0.48	0.12-1.89	
Time living in USA Country of birth (ref = Dominican)	0.12 (0.03)****	1.12	1.06-1.19	0.13 (0.03)****	1.13	1.07-1.20	
Brazilian	-0.28 (0.46)	0.75	0.30-1.87	0.32 (0.46)	0.73	0.29-1.79	
Colombian	-0.01 (0.41)	0.99	0.44-2.23	-0.07 (0.42)	0.93	0.41-2.12	
Sexual migration (ref = no)							
To affirm their sexual orientation: "to live my homosexual life more openly" and/or "to live with a lover or boyfriend"	-	-	-	-0.13 (0.39)	0.88	0.41-1.89	
To avoid persecution: to escape violence or persecution due to being gay	-	-	-	1.21 (0.50)****	3.35	1.25-8.97	

^a Standard error (SE)

* $P < 0.05$

** $P < 0.01$

*** $P < 0.001$

Table 4

Logistic regression models examining whether migration to affirm their sexual orientation (model A) and to avoid persecution (model B) are associated with becoming HIV-positive after controlling for demographic characteristics, time living in US and country of origin

	Model for migration to affirm their sexual orientation			Model for migration to avoid persecution		
	B (SE) ^a	Odds ratio	95% CI	B (SE) ^a	Odds ratio	95% CI
Intercept	-4.03 (0.99)	-	-	-4.22(1.01)	-	-
Age	0.05 (0.03)	1.05	0.99–1.10	0.05 (0.03)	1.05	0.99–1.10
Monthly Income in the US (ref=>\$1600) < \$1,600	-0.78 (0.38) *	0.46	0.22–0.96	-0.74 (0.38)	0.48	0.22–1.01
Education (ref=less than high school)						
Completed high school/GED or vocational school	-0.47 (0.53)	0.95	0.34–2.71	-0.26 (0.55)	0.77	0.26–2.26
Some college	0.10 (0.54)	1.11	0.38–3.19	0.09 (0.54)	1.10	0.38–3.18
Completed college	-0.25 (0.53)	0.78	0.28–2.21	-0.28 (0.54)	0.75	0.26–2.18
Graduate school	-0.73 (0.69)	0.48	0.13–1.85	-0.74 (0.70)	0.48	0.12–1.88
Time living in USA	0.12 (0.03) ***	1.13	1.06–1.20	0.13 (0.03) ***	1.13	1.07–1.20
Country of birth (ref=Dominican)						
Brazilian	-0.27 (0.46)	0.76	0.31–1.89	-0.32 (0.46)	0.73	0.29–1.81
Colombian	-0.01 (0.42)	1.01	0.45–2.28	-0.06 (0.42)	0.94	0.42–2.14
Sexual migration (ref=no)						
To affirm their sexual orientation: “to live my homosexual life more openly” and/or “to live with a lover or boyfriend”	0.29 (0.34)	1.32	0.69–2.58	-	-	-
To avoid persecution: to escape violence or persecution due to being gay	-	-	-	1.13 (0.44) **	3.09	1.30–7.36

^aStandard error (SE)

* $p < 0.05$

** $p < 0.01$

*** $p < 0.001$