CHAPTER 10

Perceptions of Campus Climate and Sense of Belonging Among Non-immigrant, First-Generation, and Second-Generation Students

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Successful completion of a college degree leads to a more positive career outlook and higher quality of life (Hu & Wolniak, 2013); however, the opportunities for success are impacted by campus climate, defined as the "current perceptions and attitudes of faculty, staff, and students regarding issues of diversity on campus" (Reason & Rankin, 2006, p. 11). Campus climate affects students and their higher education outcomes differentially across diverse social groups, affecting students from different gender, race/ethnicity, income, social class, and parental education groups (Griffin, Cunningham, & Mwangi, 2016; Harper & Hurtado, 2007). In particular, immigrant students may experience the campus climate in a divergent manner from non-immigrant students (Kim & Diaz, 2013; Mendez & Cabrera, 2015). For example, immigrant's academic

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achievement and psychological well-being may be negatively impacted by the promotion of customs and values of traditionally White institutions (Kim & Diaz, 2013), or they may experience more racial tension or hostility on campus (Mendez & Cabrera, 2015).

Scholars have engaged in more research about immigrants and their access to and success in higher education in recent years (Kim & Diaz, 2013). We build on research by Stebleton, Soria, Aleixo, and Huesman (2012), who used Student Experience in the Research University (SERU) survey data to examine differences across immigrant waves in relation to sense of belonging, faculty interactions, and peer interactions. Stebleton et al. (2012) found non-immigrant students reported a higher sense of belonging and more frequent communications with faculty than immigrant students. Additionally, they found that when controlling for sociodemographic factors (gender, race/ethnicity, and social class), faculty and peer interactions were associated with sense of belonging. The current study intends to build on this finding by measuring (1) differences in sense of belonging and campus climate across non-immigrant, first-generation immigrant, and second-generation student populations, and (2) the impact of campus climate on sense of belonging across immigrant groups after controlling for sociodemographic factors. As such, we review prior research related to immigrants and immigrant students

Immigrant College Students in the United States

Between 2010 and 2018, researchers expect that immigrants will comprise a majority of the United States workforce (Kim & Diaz, 2013). Therefore, it is critical for this population to be successful in higher education in order to be adequately prepared to enter the workforce and make positive contributions for themselves as individuals and the economy as a whole. Immigrants and their US-born children constitute 27% (84.3 million) of the overall US population (US Census Bureau, 2016). Additionally, in 2011–2012, immigrants comprised 24% of the undergraduate student population, with 8% of a first-generation status and 16% of a second-generation status (Arbeit, Staklis, & Horn, 2017). Arbeit et al. (2017) defined first-generation immigrants as those who were born abroad and second-generation immigrants as those who were born in the United States with at least one parent born abroad. Since immigrant students represent nearly one-quarter of the overall undergraduate population, they are an important population upon which higher

education administrators, researchers, staff, and faculty should focus. Immigrant populations have comparable enrollment, persistence, and degree completion as non-immigrant populations (Fuligni & Witkow, 2004); however, there are variations within this population in relation to race/ethnicity, immigrant status, and socioeconomic status (Kim & Diaz, 2013). Generally speaking, students from lower-income families and those who are first in their families to attend college have significantly lower rates of college enrollment and completion (Kim, 2009). In the end, it is critical for institutions to be aware of differences within immigrant college students in order to best support their adjustment to the college environment (Rocha-Tracy, 2009).

Investigations of campus climate for immigrant college students are timely, given the current political situation with the recent elimination of the Deferred Action for Childhood Arrivals (DACA) policy, which affects illegal immigrants who may be attending higher education. Possible restrictions on immigrants entering the United States for postsecondary education could lead to changes in the demographics of these institutions, which alters the experience offered through academic and social interactions with diverse individuals. Gurin, Dey, Hurtado, and Gurin (2002) conducted a longitudinal analysis that demonstrated student experiences with diversity positively predicted various learning and democracy outcomes, such as active thinking, academic skills, perspective-taking, and racial/cultural engagement.

Immigrant college students enrich our universities in many ways; however, there are additional compelling societal reasons for increasing the rates of immigrant college students' educational attainment in higher education. Recent immigrant education levels have fallen behind native-born Americans since the 1960s, which has led to the average wage of immigrants falling below native-born Americans (Kim & Diaz, 2013). There are differences in immigrants' educational attainment across various levels of education, as well as across subgroups within the larger immigrant population. In high school, first-generation immigrants are more likely to drop out than second- or third-generation immigrants (Perreira, Harris, & Lee, 2006). According to the US Bureau of Labor Statistics (2011), 26.5% of foreign-born workers over the age of 25 did not complete high school, compared with 5.4% of native-born workers in the same age category. Furthermore, within the population of immigrant students from Latin America, 45.5% did not receive a high school diploma (Kim & Diaz, 2013).

Among immigrant college students of a "traditional" age, students who were foreign-born had lower rates of enrollment (35.1%) compared to those who were native-born (43.9%; Kim & Diaz, 2013). There is also significant variation in groups, with immigrants from Mexico (the country from which the majority of individuals emigrate to the United States) having the lowest college enrollment rate at 12.3% (Kim & Diaz, 2013). The disparities in educational attainment are also apparent in the workforce: immigrants made up 15.8% of the total labor force in 2010 and, of those who were 25 or older and lacked a high school diploma, nearly half were foreign-born (US Bureau of Labor Statistics, 2011). Most of the foreign-born workers without a high school diploma were from Mexico or Central America and primarily working in occupations such as construction, cleaning and maintenance, and in restaurants (US Bureau of Labor Statistics, 2011). In the total immigration workforce, 49.9% were Hispanic and 21.8% Asian (US Bureau of Labor Statistics, 2011); however, in the college-educated immigration workforce, three quarters were Asian and non-Hispanic White, while about 18% were of Hispanic origin (Kim & Diaz, 2013). Further, for undocumented immigrants between the ages of 25–64, only 25% have attended college or earned a degree, compared to 53% of documented immigrants and 62% of US-born individuals (Nienhusser, Vega, & Carquin, 2015). These educational attainment differences influence the overall status of immigrants within the workforce, leading to fewer opportunities for immigrants to earn high wages.

The economic challenges facing many immigrant families influence their children's opportunities in higher education. While familial support is critical for immigrant college students' success in higher education, they can also feel pressure to provide financial support to the family while still ensuring academic success (Fuligni & Pedersen, 2002; Kim, 2009). The need to balance educational, familial, and financial responsibilities demonstrates the complex difficulties immigrant students often face as they earn their college degrees. Immigrant students are heterogeneous, so unique differences within students' country of origin, cultural backgrounds, language, and other intersections of identities, such as ethnicity and socioeconomic background, add to the complexity of these students' collegiate experiences (Kim & Diaz, 2013). Since immigrants comprise a significant proportion of the United States and student population, encouraging and supporting their success in college and beyond is important.

Immigrant Students and Campus Climate for Diversity and Inclusion

Campus climate is defined as the "current perceptions and attitudes of faculty, staff, and students regarding issues of diversity on campus" (Reason & Rankin, 2006, p. 11). Students experience the postsecondary climate differentially based upon their immigrant status (Kim & Diaz, 2013); for example, first- and second-generation students experience a lower sense of belonging and satisfaction on campus than third- and fourth-generation students (Stebleton, Huesman, & Kuzhabekova, 2010). Immigrant students experience more racial tension on campus in the wake of policy changes related to immigrant status; yet, intersections between students' immigrant status, generation, race/ethnicity, and gender suggest students' perception of campus climate is complexly associated with their social identities (Mendez & Cabrera, 2015).

Immigrant college students often need to reconcile their multiple identities of immigrant and racial/ethnic identity with integration into a usually different mainstream culture on campus (Kim & Diaz, 2013). These multiple and competing challenges can have negative effects on immigrant students' success; for instance, perceived racism is negatively associated with foreign-born Asian-American students' academic performance (Yoo & Castro, 2011). Black immigrants who are second-generation or later experience campus racial climate in a similar manner as Black non-immigrant students, indicating that students' ethnic background and generational status supplement student understandings of their experiences and race does not supersede these understandings (Griffin et al., 2016). Another potential area immigrant students may need to reconcile diverse identities is in relation to religion. Chatman (2008) found students who stated they were religious reported higher levels of sense of belonging, particularly Muslim and Jewish students. Such a finding could indicate these students find a community within their religious affiliation, but does not necessarily indicate overall perceptions of campus climate within these groups.

Campus climate can influence immigrant students' sense of belonging on campus (Stebleton, Soria, Huesman, & Torres, 2014). There is a long history of research showing that students' sense of belonging and integration into a campus community is related to their retention (Astin, 1993; Pascarella & Terenzini, 2005; Tinto, 1975). When students feel they belong on campus, they are able to focus on their academics, rather

than focusing energy on finding the right fit or even feeling uncomfortable or unsafe in their environment. If students are concerned about other aspects of the institutional environment, it takes energy and focus away from their academic pursuits, which can negatively impact their outcomes in this area. According to Muñoz (2013), building a sense of community creates academic and social spaces that allow learning in a supportive environment. Faculty and peers again have an important role to play because having a professor who knows one's name and working with peers contribute to immigrant students' sense of belonging (Stebleton et al., 2012).

Various factors have an influence on immigrant students' sense of belonging, including their generational status and nationality. Overall, immigrant students feel less of a sense of belonging at research institutions compared to non-immigrant students, with variations between students by their generational status (Chatman, 2008; Stebleton et al., 2010). Foreign-born students and those with at least one parent who was foreign-born tend to have lower rates of belonging compared to native-born immigrants (Chatman, 2008). Additionally, for immigrants who moved to the United States in primary school, faculty and peer interactions are positively predictive of sense of belonging, but for immigrants who moved to the United States in secondary school, faculty interactions are not predictive of sense of belonging (Stebleton et al., 2014), which demonstrates some of the differences across generational status.

In addition to these overarching areas, immigrant students' relationships with parents and peers, interactions with the college environment, and emotional and financial support from these sources can positively influence their postsecondary experiences (Kim & Diaz, 2013). Kim and Diaz (2013) discussed the need to understand the reliance of immigrant students on social ties that include ethnic peer networks or ethnic communities, the intersection of immigrant status and low-income may double the adverse effects in relation to difficulty in university adjustment, and while family may be supportive, they may not understand the academic demands faced by students at a university level.

Given those differential experiences, it is important to examine differences among immigrant students across various demographic characteristics. There is a lack of research on incorporating social identities, such as race, ethnicity, and gender, into student development research for immigrant students (Kim & Diaz, 2013). These social identity factors

may be more relevant for some groups than for others, but the intersection of immigrant and minority students has received little attention (Kim & Diaz, 2013). Therefore, in this study, we will examine potential differences in how students experience both campus climate and sense of belonging, taking into consideration their generational status (non-immigrant, first-generation, and second-generation), as well as social identity characteristics (gender, race, ethnicity, income, social class, and parental education).

Given the need for more research on immigrant students, in this study, we pose the following research questions:

1. Do perceptions of campus climate and sense of belonging vary between non-immigrant, first-generation, and second-generation students?
2. Do perceptions of campus climate and sense of belonging vary within non-immigrant, first-generation, and second-generation students for White students compared to students of color?
3. Do perceptions of campus climate differentially impact students' sense of belonging ("I feel valued as an individual") between non-immigrant, first-generation, and second-generation students after controlling for sociodemographic characteristics?
4. Do perceptions of campus climate differentially impact students' sense of belonging ("I feel I belong") between non-immigrant, first-generation, and second-generation students after controlling for sociodemographic characteristics?

Framework for the Current Study

The theory used to frame the current study is ecological systems theory (Bronfenbrenner & Morris, 2006). The basis of this theory lies in the individual being in the center of a sphere of influence that includes interactions over time between family, institutions, policy, and culture (Bronfenbrenner & Morris, 2006). Bronfenbrenner stated that an individual's development is shaped by the influence of various, interconnected systems that depend on context and evolve over time. Kim and Diaz (2013) used the ecological systems framework in an immigrant student context because it provides a framing theory, which demonstrates that specific life history, social circumstances, history, culture, and time have an impact on the reciprocal interactions between

an immigrant student and their environments. These interactions and multifaceted model are relevant in evaluating and interpreting how immigrant students experience campus climate and perceive a sense of belonging on campus. Each of Bronfenbrenner's layers can be connected to influences on immigrant students' experiences in a higher education context.

The microsystem is the most immediate context that influences the individual and includes interactions with family, peers, school, local community, etc. (Bronfenbrenner & Morris, 2006). For immigrant students, the microsystem includes the same context; however, there may be multiple layers within this context. For example, building connections with peers who have similar backgrounds may be particularly influential in finding a sense of belonging on campus. In contrast, this immediate context may be an adverse influence if a student does not feel their immigration background is respected by peers or faculty; moreover, this context represents how the same layer can provide either positive or negative interactions or experiences.

The mesosystem represents the linkages and the interplay between elements of the microsystem (Bronfenbrenner & Morris, 2006). This interplay is particularly important for immigrant students as it represents how they are often living between two cultures and need to figure out how to balance both. The additional difficulties often experienced by immigrant students lie here, such as a student's family not understanding the time demands of college, or the need to work to help support family in addition to attending school, or language barriers, or finding a comfortable balance between their home culture and school culture. The mesosystem layer also demonstrates the link between how policies influence the more immediate context, such as how immigration policy will have an influence on a student's personal experience on campus, or how financial aid policies may affect whether or not they may be able to continue attending school.

The exosystem is further removed from the individual and may include settings in which the individual is not directly involved, but still influential on the individual in a secondary manner (Bronfenbrenner & Morris, 2006). The exosystem is the layer that includes the policies that might influence the more immediate layers. For example, immigration policies can influence attitudes toward these students on campus, or financial aid policies in relation to undocumented students can influence an immigrant student's access to college.

Last is the macrosystem, which is the overarching system wherein the others are housed that includes the larger political and historical context and cultural expectations (Bronfenbrenner & Morris, 2006). These contexts and cultural expectations are aspects of the environment that native students may not even notice, but immigrant students might view as more influential because they are not their native expectations. The current political context in relation to immigration issues could potentially influence how these students feel on campus. All these levels of a student's environment combine and reciprocally link over time to influence campus climate and sense of belonging.

Method

Instrument

We utilized data from the SERU survey, which was administered at eight large, public research universities to undergraduates in spring 2017 (n=54,439). The SERU survey contains over 600 items, including items related to civic and community engagement, academic engagement, social experiences, cocurricular experiences, campus climate, and demographic questions. Researchers have provided evidence for the internal consistency of students' responses over several administrations of the survey (Chatman, 2011a, 2011b). Response rates ranged between 15 and 40% at the participating institutions.

Participants

We analyzed survey responses from undergraduate participants who identified their immigration background as non-immigrant (66%, n=30,072), first-generation (24.2%, n=11,019), or second-generation (9.8%, n=4487). Table 10.1 displays participants' gender identity, race/ethnicity, self-identified social class, and parent education according to immigration background. Looking at the demographic breakdown across groups, first-generation and second-generation students are more likely to be low-income or working class and to be first-generation in college as compared to non-immigrant students. The largest difference between non-immigrant and immigrant students was in terms of race/ethnicity: 83.4% of non-immigrant students are White (n=25,089) as compared to 20.7% of first-generation students (n=2279) and 19.9%

Table 10.1 Frequency of participant demographics by immigration background

		Non-immigrant		*First-generation*		*Second-generation*	
		n	%	*n*	%	*n*	%
Gender identity	Male/man	10,534	35.2	3870	35.3	1694	37.9
	Female/woman	18,740	62.6	6869	62.7	2685	60.1
	Trans or genderqueer/non-conforming	266	0.9	85	0.8	43	1.0
	Decline to state/prefer to self-describe	379	1.2	124	1.1	42	1.0
Race/ethnicity	American Indian	93	0.3	6	0.1	2	0.0
	African American	1089	3.6	611	5.5	380	8.5
	Hispanic	2117	7.0	2611	23.7	957	21.3
	Asian	211	0.7	4259	38.7	1928	43.0
	Native Hawaiian or Pacific Islander	23	0.1	61	0.6	21	0.5
	White	25,089	83.4	2279	20.7	891	19.9
	Multiracial	781	2.6	748	6.8	129	2.9
	Declined to state/not provided	669	2.3	444	4.1	179	4.0
Social class	Low- income	1360	4.5	1132	10.3	594	13.3
	Working-class	4494	15.0	2428	22.1	1181	26.5
	Middle-class	12,175	40.7	4261	38.8	1706	38.2
	Upper-middle or professional-middle	10,759	35.9	2928	26.7	908	20.3
	Wealthy	1160	3.9	234	2.1	75	1.7
Parent education	No college	2230	7.4	2103	19.2	941	21.2
	Some college	4295	14.3	1590	14.5	557	12.5
	Four-year degree (one or both parents)	13,330	44.5	3454	31.5	1593	35.0
	Graduate/professional degree (one or both parents)	10,095	33.7	3828	34.9	1399	31.4
Total		30,072	66.0	11,019	24.2	4487	9.8

of second-generation students ($n=891$). Due to these differences, our pairwise comparisons include an analysis of the intersection between race/ethnicity and immigration background, and our regressions analyses include race/ethnicity, social class, and parent education demographic variables as control characteristics.

Analysis

We began by using pairwise *t*-tests to examine whether there are statistically significant differences in perceptions of campus climate for diversity and inclusion and sense of belonging among (1) non-immigrant, first-generation, and second-generation students, and (2) White students and students of color within each non-immigrant, first-generation, and second-generation group. The four campus climate Likert-scale items used in these analyses were "Overall, I feel comfortable with the climate for diversity and inclusiveness at this campus," "Students of my immigration background are respected on this campus," "This is a safe and secure campus," and "This is a welcoming campus." The two Likert-scale items measuring sense of belonging were "I feel valued as an individual at this campus" and "I feel that I belong at this campus." These six items were scaled one (strongly disagree) to six (strongly agree).

We then conducted multiple regression analyses predicting each of the sense of belonging items among non-immigrant, first-generation, and second-generation students, using the four-campus climate items as the main independent variables and the demographic characteristics of gender, race, social class, and parent education as controls.

Results

Pairwise Contrasts

The results suggest statistically significant differences ($p<.05$) between non-immigrant students and their peers from immigrant backgrounds across all campus climate and sense of belonging items analyzed. We observed the largest effects in students' perceptions of respect for their immigration background on campus and feelings of belonging on campus. On average, non-immigrant students were significantly more likely to agree their immigration backgrounds were respected ($M=5.19$, $SD=.98$) as compared to first-generation ($M=4.36$, $SD=1.31$; Table 10.2) and

Table 10.2 Comparison of means for perceptions of campus climate and sense of belonging among non-immigrant and first-generation students

		Non-immigrant	*First-generation*	
		M (SD)	*M (SD)*	*d*
Campus climate	Comfortable with climate for diversity and inclusiveness	4.59* (1.19)	4.36 (1.25)	0.19
	Students of my immigration background respected on campus	5.19* (.98)	4.36 (1.31)	0.72
	Safe and secure campus	4.63* (1.09)	4.42 (1.13)	0.19
	Welcoming campus	4.83* (1.06)	4.60 (1.13)	0.21
Sense of belonging	I feel valued as an individual at this campus	4.21* (1.22)	4.01 (1.25)	0.17
	I feel that I belong at this campus	4.74* (1.19)	4.43 (1.25)	0.26

Note $*p<.05$

second-generation students ($M=4.32$, $SD=1.28$; Table 10.3). The effect sizes as measured by Cohen's d suggest moderate to large differences in perceptions of respect between non-immigrant and first-generation students ($d=.72$) and non-immigrant and second-generation students ($d=.76$). In terms of belonging, non-immigrant students were significantly more likely to agree they belong at their campus ($M=4.74$, $SD=1.19$) as compared to first-generation ($M=4.43$, $SD=1.25$; Table 10.2) and second-generation students ($M=4.46$, $SD=1.22$; Table 10.3), with effect sizes suggesting small differences in these comparisons ($d=.26$ and $d=.23$, respectively). While there were some statistically significant contrasts in campus climate and sense of belonging between first-generation and second-generation students (Table 10.4), these differences were very small according to Cohen's d.

The results of pairwise contrasts between White students and students of color within the non-immigrant and first-generation groups suggest statistically significant differences across all campus climate and sense of belonging items analyzed, with the strongest effects observed for differences in perceptions of respect for immigration background on campus (Tables 10.5 and 10.6). On average, non-immigrant and first-generation White students were significantly more likely to agree

Table 10.3 Comparison of means for perceptions of campus climate and sense of belonging among non-immigrant and second-generation students

		Non-immigrant	*Second-generation*	
		M (SD)	*M (SD)*	*d*
Campus climate	Comfortable with climate for diversity and inclusiveness	4.59* (1.19)	4.50 (1.20)	0.08
	Students of my immigration background respected on campus	5.19* (.98)	4.32 (1.28)	0.76
	Safe and secure campus	4.63* (1.09)	4.50 (1.12)	0.12
	Welcoming campus	4.83* (1.06)	4.68 (1.11)	0.14
Sense of belonging	I feel valued as an individual at this campus	4.21* (1.22)	4.13 (1.21)	0.07
	I feel that I belong at this campus	4.74* (1.19)	4.46 (1.22)	0.23

Note $^*p<.05$

their immigration backgrounds were respected ($M=5.30$, $SD=.87$ and $M=4.76$, $SD=1.23$, respectively) as compared to non-immigrant and first-generation students of color ($M=4.59$, $SD=1.33$ and $M=4.24$, $SD=1.31$, respectively). Cohen's d indicated a moderate effect size for respect between non-immigrant White students and students of color ($d=.63$) and a medium effect size for respect between first-generation White students and students of color ($d=.41$). Looking at the contrast between second-generation White students and students of color (Table 10.7), only the campus climate items revealed statistically significant differences, and these were all small according to Cohen's d.

Multiple Regression

Tables 10.8 and 10.9 display beta weights for the six regression models run predicting each sense of belonging item ("I feel valued as an individual at this campus" and "I feel that I belong at this campus") among non-immigrant, first-generation, and second-generation student groups, with campus climate as the main independent variables and demographic characteristics as controls. We found that after controlling for demographic factors among the three groups, the campus climate factors

Table 10.4 Comparison of means for perceptions of campus climate and sense of belonging among first-generation and second-generation students

		First-generation	*Second-generation*	
		M (SD)	*M (SD)*	*d*
Campus climate	Comfortable with climate for diversity and inclusiveness	4.36 (1.25)	4.50* (1.20)	0.11
	Students of my immigration background respected on campus	4.36 (1.31)	4.32 (1.28)	0.03
	Safe and secure campus	4.42 (1.13)	4.50* (1.12)	0.07
	Welcoming campus	4.60 (1.13)	4.68* (1.11)	0.07
Sense of belonging	I feel valued as an individual at this campus	4.01 (1.25)	4.13* (1.21)	0.10
	I feel that I belong at this campus	4.43 (1.25)	4.46 (1.22)	0.02

Note $*p < .05$

Table 10.5 Comparison of means for perceptions of campus climate and sense of belonging among non-immigrant white students and students of color

		Non-immigrant White students	*Non-immigrant students of color*	
		M (SD)	*M (SD)*	*d*
Campus climate	Comfortable with climate for diversity and inclusiveness	4.65* (1.13)	4.17 (1.42)	0.37
	Students of my immigration background respected on campus	5.30* (.87)	4.59 (1.33)	0.63
	Safe and secure campus	4.67* (1.06)	4.40 (1.21)	0.24
	Welcoming campus	4.87* (1.02)	4.58 (1.21)	0.26
Sense of belonging	I feel valued as an individual at this campus	4.25* (1.21)	4.01 (1.26)	0.19
	I feel that I belong at this campus	4.78* (1.17)	4.49 (1.29)	0.24

Note $*p < .05$

Table 10.6 Comparison of means for perceptions of campus climate and sense of belonging among first-generation white students and students of color

		First-generation White students	*First-generation students of color*	
		M (SD)	*M (SD)*	*d*
Campus climate	Comfortable with climate for diversity and inclusiveness	4.51* (1.22)	4.30 (1.26)	0.17
	Students of my immigration background respected on campus	4.76* (1.23)	4.24 (1.31)	0.41
	Safe and secure campus	4.54* (1.12)	4.37 (1.13)	0.15
	Welcoming campus	4.71* (1.14)	4.56 (1.12)	0.13
Sense of belonging	I feel valued as an individual at this campus	4.11* (1.28)	3.98 (1.23)	0.10
	I feel that I belong at this campus	4.57* (1.27)	4.39 (1.25)	0.14

Note $*p < .05$

Table 10.7 Comparison of means for perceptions of campus climate and sense of belonging among second-generation white students and students of color

		Second generation White students	*Second generation students of color*	
		M (SD)	*M (SD)*	*d*
Campus climate	Comfortable with climate for diversity and inclusiveness	4.64* (1.17)	4.46 (1.20)	0.15
	Students of my immigration background respected on campus	4.58* (1.23)	4.24 (1.28)	0.27
	Safe and secure campus	4.58* (1.08)	4.47 (1.14)	0.10
	Welcoming campus	4.81* (1.09)	4.64 (1.12)	0.15
Sense of belonging	I feel valued as an individual at this campus	4.18 (1.22)	4.11 (1.21)	0.06
	I feel that I belong at this campus	4.52 (1.24)	4.44 (1.21)	0.07

Note $*p < .05$

Table 10.8 Regression models predicting sense of belonging ("I feel valued as an individual") among non-immigrant, first-generation, and second-generation students

	Predictors	*Non-immigrant*		*First-generation*		*Second-generation*	
		B	*SE*	*B*	*SE*	*B*	*SE*
	R^2 (%)	22.9		25.9		26.5	
	Intercept	1.330***	.066	1.265***	.075	1.247***	.100
Demographic variables	Female/woman	.133***	.018	.125***	.025	.096**	.033
	Student of color	.006	.025	.013	.030	.071	.039
	Low-income	−.258***	.045	−.077	.044	−.053	.054
	Working class	−.164***	.026	−.107***	.031	−.052	.040
	First generation in college	−.009	.035	−.015	.034	−.048	.044
Campus climate variables	Comfortable with climate for diversity and inclusiveness	.065***	.011	.095***	.015	.069**	.022
	Students of my immigration background are respected on campus	.054***	.010	.052***	.011	.108***	.016
	Safe and secure campus	.059***	.011	.047**	.016	.080***	.021
	Welcoming campus	.420***	.012	.409***	.017	.363***	.024

Note $^{**}p<.01$, $^{***}p\leq.001$

Table 10.9 Regression models predicting sense of belonging ("I feel that I belong") among non-immigrant, first-generation, and second-generation students

	Predictors	*Non-immigrant*		*First-generation*		*Second-generation*	
		B	*SE*	*B*	*SE*	*B*	*SE*
	R^2(%)	25.7		29.4		26.7	
	Intercept	1.757***	.063	1.618***	.073	1.649***	.100
Demographic variables	Female/woman	.081***	.017	.067**	.025	.039	.033
	Student of color	.009	.024	−.001	.029	.049	.039
	Low-income	−.279***	.043	−.136**	.043	−.044	.054
	Working class	−.197***	.024	−.130***	.031	−.054	.040
	First generation in college	.019	.033	.023	.033	.044	.045
Campus climate variables	Comfortable with climate for diversity and inclusiveness	−.002	.010	.051**	.015	.053*	.022
	Students of my immigration background are respected on campus	.067***	.009	.032**	.011	.028	.016
	Safe and secure campus	.029**	.011	.018	.016	.030	.021
	Welcoming campus	.512***	.012	.516***	.017	.481***	.024

Note *$p<.05$, **$p<.01$, ***$p\leq.001$

were nearly always positively and significantly associated with a sense of belonging. The campus climate variable associated with the highest increases in sense of belonging was the perception of the campus as a welcoming place.

Discussion

We investigated variations in perceptions of campus climate and sense of belonging among non-immigrant, first-generation, and second-generation students at large, public research universities. The results suggest large significant differences between non-immigrant students and their peers from immigrant backgrounds in perceptions of respect for their immigration background and feelings of belonging on campus. Non-immigrant students are more likely to feel a sense of belonging than their first- and second-generation peers, while first-generation and second-generation students report similar feelings of belonging on campus. Looking at the intersection of race and immigration status, White students are more likely to report a positive campus climate in terms of respect for their immigration background than students of color within the non-immigrant and first-generation groups, while no significant differential effects were found between second-generation White students and their peers of color. Our results also suggest campus climate is positively and significantly associated with a sense of belonging for non-immigrant, first-generation, and second-generation students, even after controlling for race and other sociodemographic factors.

Based on these results, there are several recommendations and promising practices that educators, administrators, and policymakers at large, public research universities could implement to ensure a positive campus climate and greater feelings of belonging among first- and second-generation immigrant students. Policy implementation that includes increased opportunities for engagement could help promote a positive campus climate and sense of belonging (Gildersleeve & Vigil, 2015; Harper & Hurtado, 2007). Student engagement is defined by Kuh (2009) as the time and effort students dedicate to participating in activities that promote positive college outcomes, in addition to how institutions can encourage students to participate in these activities. This definition recognizes the role that institutions play in student engagement. Research on engagement demonstrates the necessity of institutional policies and practices that stimulate educationally purposeful activities both in and

out of the classroom (Pascarella & Terenzini, 2005). This type of policy implementation could focus on encouraging campus climate and sense of belonging factors. While these practices are beneficial, college experiences are differentially beneficial for diverse student groups (Pascarella & Terenzini, 2005). Therefore, further research is warranted in relation to how these promising practices apply and benefit immigrant students.

One practice that can be promoted through institutional influence is the encouragement of engagement and interaction across students with diverse backgrounds. This practice may seem like a simple solution, but research has found despite high diversity on campus, sometimes there are still low rates of interaction across racial groups (Griffin et al., 2016). Griffin et al. (2016) suggested that practitioners focus on encouraging and creating opportunities for students of different backgrounds to interact and learn from one another. Some methods to encourage interaction across diverse student backgrounds include: facilitate creation of student-led organizations, collaborate with student organizations where immigrant students congregate, provide opportunities for immigrant students to feel a sense of place, create curricular options where all students can engage academically and socially, and implement peer mentoring programs for incoming immigrant students (Stebleton et al., 2010).

Another practice that has long been touted as beneficial in increasing student learning and persistence is the implementation of learning communities (Tinto, 1999). Learning communities can be defined in multiple ways, but an early iteration involved linking students together in some way (e.g. course scheduling) in order to promote additional interaction and the sharing of knowledge, learning, and responsibility (Tinto, 1999). The idea behind these learning communities is to promote interaction and further integration, both academic and social, which can benefit the students involved. The application of this concept to the current context would encourage cross-cultural integration and learning, to benefit perceptions of campus climate and sense of belonging for immigrant students. Potential advantages of learning communities for immigrant students include integrating the curriculum, providing academic support, fostering positive academic self-efficacy (Soria & Stebleton, 2013), learning about college expectations, building community for both students of color and White students, and facilitating connections with faculty (Stebleton et al., 2012).

Limitations and Directions for Future Research

While the results indicate significant and strong effect sizes for the campus climate and sense of belonging factors explored in pairwise contrasts, the overall variance in sense of belonging accounted for by campus climate in the regression models is moderate to small. We recommend further research investigating a suite of factors alongside campus climate to learn more about institutional contributions to immigrant students' sense of belonging, such as faculty and peer interactions (i.e. Stebleton et al., 2012).

The generalizability of this study is restricted because it explores the experiences of immigrant students at a specific type of institution. The strength of our findings would be bolstered by exploring variations in perceptions of campus climate and sense of belonging among non-immigrant, first-generation, and second-generation students at other types of higher education institutions with varying levels of competitiveness and institutional resources, such as less selective open-access community colleges or highly-selective liberal arts colleges.

We did not investigate how the findings may break down across immigrant students' ethnic heritage or country of origin, such as Latino/a, Afro-Caribbean, African, or East Asian. While we considered variations in immigrants' experiences based on other sociodemographic factors and the general umbrella of "students of color," distinctions within immigrant populations is important and warrant further investigation. Finally, we did not have information available to consider the contribution of students' documentation status in our analysis. The pathways of college access and success for undocumented first-generation and second-generation students are significantly different than the pathways for native-born or peers with documentation, particularly in terms of lack of federal/state financial aid (Kim & Diaz, 2013). While it may be difficult to perform quantitative analyses looking at the impact of documentation status on immigrant student perceptions of campus climate and sense of belonging due to the lack of availability of this information (and ethically dubious nature of collecting it), it would be worthwhile to pursue similar questions in a qualitative or mixed-methods study.

Conclusion

Higher education institutions play a significant role in the life outcomes of students, including those from immigrant backgrounds. Immigrant students attending large, public research universities may experience the

campus climate for diversity and inclusion, and the degree to which they belong on campus, differently than non-immigrant students in ways that have the potential to negatively affect their college success. The findings and recommendations discussed in this chapter may assist practitioners and administrators in cultivating university campus life in ways that ensure the positive experiences and outcomes of immigrant students.

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