

**The Intersections of Race and Sexuality in LGBTQ+ College Students' Belongingness,  
Institutional Commitment, and Outness**

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**Abstract**

Although scholars have examined how LGBTQ+ college students encounter marginalizing and discriminatory experiences in collegiate environments, few quantitative studies disaggregate data to see how different populations within the LGBTQ+ community experience these outcomes. The purpose of this quantitative study was to investigate how student subgroups within the LGBTQ+ community differed in their perceptions of belongingness, institutional commitment, and outness. Using large-scale, multi-institution data from thousands of first-year and senior undergraduates, we examined how these important affective outcomes differ by intersections of sexual and racial/ethnic identities. Findings suggest that the intersection of these identities does create differences in student perceptions that aren't necessarily visible when examining sexual or racial/ethnic identities in isolation.

*There could be more inclusion of LGBTQ+ students that are also part of racial and ethnic minorities. It is unfortunate that in discussions this is not taken into consideration because minorities are the ones that are targeted the most.*

*--An open-ended question response by a Queer Latinx student*

Scholars have long examined how lesbian, gay, bisexual, and queer (LGBQ+) college students encounter marginalizing and discriminatory experiences in collegiate environments (e.g., Hong, Woodford, Long, & Renn, 2016; Renn, 2010). For example, a major body of LGBQ+ research in higher education has investigated these collegians' perception of their campus climate, finding that LGBQ+ students largely view their campus environments as heterosexist and unwelcoming (Brown, Clarke, Gortmaker, & Robinson-Keilig, 2004; Garvey, Sanders, & Flint, 2017; Rankin, 2005). Connected to matters of campus climate, researchers have also studied how students who identify as part of the LGBQ+ community encounter instances of harassment and discrimination while enrolled in an institution of higher education (Hong et al., 2016; Rankin, Weber, Blumenfeld, & Frazer, 2010; Woodford, Han, Craig, Lim, & Matney, 2013).

Though research has highlighted the troubled experiences that LGBQ+ individuals face at colleges and universities, scholars have conversely explored what contributes to these students feeling affirmed in their queer identities on campus (e.g., Garvey & Rankin, 2015; Linley et al., 2016; Vaccaro & Newman, 2017). Notably, Vaccaro and Newman (2017) argued that first-year LGBQ students feel more comfortable in institutional environments that promote pro-messaging around sexuality. By seeing an institutional commitment to the LGBQ+ community, these students experienced a stronger sense of belonging on campus and were more likely to live

out their sexuality. Scholarship such as Vaccaro and Newman's (2017) article reveals a need for research that considers how LGBQ+ collegians experience belonging on campus, their perceptions of institutional commitment to LGBQ+ communities, and their comfort in coming out on campus. Few quantitative studies in higher education research these constructs from a non-essentialist perspective, disaggregating data to see how different populations within the LGBQ+ student community experience these outcomes (see Kulick, Wernick, Woodford & Renn, 2017 for a notable exception). Yet, as the quote at the beginning of this paper communicates, comprehending how the intersections of identities influence collegiate experiences is of vital importance.

Thus, the purpose of this research was to examine how various student subgroups within the LGBQ+ community differed in their perceptions of belongingness, institutional commitment, and outness. This study utilized regression analysis to investigate differences between LGBQ+ collegians and their experiences when disaggregating by sexuality (e.g., gay/lesbian, bisexual, queer, etc.) and by racial groups. This study provides a nuanced and critical understanding of how individuals within the LGBQ+ community may differ as it pertains to student experiences. Importantly, this research challenges the essentialism that frequently occurs when scholars research the LGBQ+ college student community. By disaggregating data and investigating specific subgroups, this paper actively works to resist the ways that higher education scholarship sustains Whiteness and normative ideas of sexuality within LGBQ+ student research. This study thus provides a vital insight into the ways that the intersections of race and sexuality can affect student outcomes and experiences. Though scholarship that explores intersectional differences within the LGBQ+ college student community has started to emerge in higher education (see

Kulick et al., 2017), more research is needed in this area. The question that guided this inquiry was as follows:

1. Are perceptions of belongingness, institutional commitment, and outness different for specific sexual minority and racial groups within the LGBTQ+ college student community?

### **Positionality**

We are scholars of higher education, comprising of doctoral students and a faculty member. We represent a diversity of identities and approach our research from a variety of different methodological perspectives. Only one of the researchers holds a similar sexual and racial identity as the students in the study, queer Latino. Two of the researchers' identify as queer and understand there are inequities between dominant and non-dominant sexual orientations as well as the nuances that exist within the LGBTQ+ community. The research team is split in strength and focus of our background in research between quantitative and qualitative research methods. The qualitative researchers found a way to highlight some individual voices of our research participants within the study. When setting up the research project we were intentional about trying to steer away from problematic quantitative practices. There was effort to look at smaller intersecting populations and care to not compare our students to white straight men, who overwhelming dominated the survey responses. The researchers used the study as an opportunity to elevate the unique experiences of LGBTQ+ students of color without the burden of being lumped together with assumed monolithic experiences, a tendency within quantitative research when approaching smaller populations. The combination of qualities from the researchers create a critical lens for the study. Although we have many differences, we share a desire to shed light on the experiences of students who are often overlooked in higher education research. The

individual salient identities held by the group held us accountable to looking at the intersections of race and sexuality as the focus of the study. In this study, we use quantitative tools to start necessary conversations needed to begin critical conversations about LGBTQ+ students of color.

*I identify as a queer Latino cisgender man. My identities as a queer person of color have led to a strong scholarly interest in how LGBTQ students of color understand their intersecting identities and how institutions contribute to this exploration.*

*--Antonio, second co-author*

### **Literature Review**

To frame the current study, we found it necessary to survey the existing scholarship on the three student outcomes and experiences that are at the heart of this research: belongingness, institutional commitment, and outness. The extant literature has revealed how racial and sexual minorities report their experiences on campus with some studies looking at subgroups within these marginalized populations. A smaller amount of research has also focused on those who identify as part of the LGBTQ+ community *and* as a person of color. As studies on LGBTQ+ students of color in higher education continue to increase (Duran, 2018b), scholars have added important nuance into how specific subgroups within the LGBTQ+ community differ from their peers, suggesting a critical focus necessary to advance research and practice.

#### **Belongingness**

College students' sense of belonging has long captured the attention of educational researchers due to the relationship between belongingness and how students persist at their institutions (e.g., Museus, Yi, & Saelua, 2017; Patterson Silver Wolf, Perkins, Butler-Barnes, & Walker, 2017). Of particular relevance to this research, studies have highlighted that belongingness differs for collegians from marginalized backgrounds compared to individuals

who hold majority identities (Strayhorn, 2019). For example, scholars have investigated how students of color (e.g., Hausmann, Schofield, & Woods, 2007; Johnson et al., 2007; Museus et al., 2017) and sexual minorities (Evans, Nagoshi, Nagoshi, Wheeler, & Henderson, 2017; Vaccaro & Newman, 2017) describe their experiences with belonging.

Studies such as Johnson et al. (2007) and Museus et al. (2017) showed that racial groups significantly differ in their belongingness when compared to one another, most likely due to racial campus climates present at colleges and universities. In their analysis of first-year undergraduate students from across the country, Johnson et al. (2007) found students of color reported lower scores on belonging compared to their White peers. Yet, Museus et al.'s (2017) study featuring three institutions showed that when controlling for key environmental variables, Latinos indicated higher sentiments of belonging compared to White individuals. When it comes to sexuality, literature has named the collegiate factors influence belonging for sexual minorities (Evans et al., 2017; Vaccaro & Newman, 2017), emphasizing the role of campus resources and peer, staff, and faculty connections. Additionally, Longerbeam, Inkelas, Johnson, and Lee's (2007) analyses of data from the National Study of Living-Learning Programs revealed that gay men indicated a stronger sense of belonging than those who identified as lesbian, bisexual, and heterosexual. Longerbeam et al.'s (2007) work hence sets a necessary foundation for further exploring how subgroups within the LGBTQ+ community rate their experiences with belonging.

Also of interest to this study, a smaller body of qualitative research has also started to interrogate belongingness specifically for LGBTQ+ students of color (e.g., Duran, 2018a; Strayhorn, 2019). Though these studies are helpful to contextualize the present study, they did not examine the differences that exist within various racial groups within the LGBTQ+ communities. Rather, Duran (2018a) and Strayhorn (2019) sought to explore what characterizes

belonging for LGBTQ+ students of color. Notably, these studies identified spaces on- and off-campus where LGBTQ+ students of color (e.g., student organizations) felt belongingness, together with noting how making connections with people who validated their intersecting identities also contributed to this outcome. This current study thus builds upon this literature by seeking to comprehend how various sexualities, races/ethnicities, and those at the intersections of both report their belongingness.

### **Institutional Commitment**

Related to belongingness, another outcome of interest in this research involves the notion of institutional commitment. In fact, Hausmann et al. (2007) revealed that belongingness was significantly associated with institutional commitment, a concept that measures students' perception of how dedicated their college is to their success and well-being. As a construct, institutional commitment is typically related to how well a student feels that they can academically and socially integrate at their university (Davidson, Beck, & Grisaffe, 2015). Related to this, students often have to feel as though their institution generates sufficient opportunities for this to occur.

For this particular study, the measure of institutional commitment applied specifically to LGBTQ+ individuals. Despite the dearth of scholarship that examines differences in institutional commitment across the LGBTQ+ community, researchers have drawn attention to how colleges and universities communicate to LGBTQ+ populations that they matter (e.g., Garvey & Rankin, 2015; Pitcher, Camacho, Renn, & Woodford, 2018). For example, taking an organizational theory perspective, Pitcher et al. (2018) communicated that by providing supportive policies, programs, and services, institutions can serve an integral role in the success of LGBTQ+ college

students. This interest in institutional commitment has also extended into the scholarship on those who hold multiple marginalized identities.

Though research on LGBTQ+ students of color has not examined “institutional commitment” specifically, the existing literature centered on this population have highlighted the shortage of resources and spaces dedicated to these collegians (Duran, 2018b). What studies such as Harris (2003), Patton and Simmons (2008), as well as Peña-Talamantes (2013) underscore is that LGBTQ+ collegians of color rarely have access to programs and role models that affirm their intersecting identities. This lack of services on campus is compounded by the fact that LGBTQ identity centers, which have historically played a beneficial role in the lives of marginalized populations on campus, rarely engage overlapping marginalized identities (Mitchell & Means, 2014). These harrowing realities at colleges and universities can shape students’ perceptions of how committed their institutions are to them and their identities.

### **Outness**

In addition to belongingness and institutional commitment, this study also sought to comprehend how outness varies for populations within the LGBTQ+ community. Scholars have paid considerable attention to ideas of outness, frequently described as the degree to which a person discloses their sexuality, because of the costs associated with being out for those who identify as lesbian, gay, bisexual, and queer (Garvey & Rankin, 2015). Though research such as Garvey and Rankin’s (2015) has explored which groups within queer- and trans-spectrum communities are more likely to be out, finding that cisgender LGBTQ+ women had higher degrees of outness, existing scholarship has focused specifically on identity disclosure for LGBTQ+ students of color.

This literature on LGBTQ+ students of color and their outness has largely been qualitative in nature, noting the considerations that these individuals make in choosing to disclose their identity (e.g., Duran & Pérez, 2017; Eaton & Rios, 2017; Patton, 2011; Narui, 2014; Strayhorn, 2014; Tillman-Kelly, 2015). As Tillman-Kelly (2015) described in his dissertation on identity disclosure for GLBQ students of color, these collegians faced a number of complex factors when discussing their identities with others, sometimes choosing to use identity labels that were more readily known or choosing not to come out at all. Though studies such as Strayhorn (2014) have shared that college represents a time for LGBTQ+ students of color to live out their identities, a large body of research has shown how these individuals may not feel comfortable or a need to share their identities on campus (e.g., Patton, 2011; Strayhorn, 2012) or to their family (Duran & Pérez, 2017; Eaton & Rios, 2017; Narui, 2014). Despite providing vital perspectives to outness for those at the intersections of multiple identities, these qualitative studies centered on specific subgroups within the LGBTQ+ community, rather than making comparisons across populations.

Seeing this gap in the literature, a recent quantitative study by Garvey, Mobley, Summerville, and Moore (2018) investigated how queer and trans\* students of color navigate collegiate contexts and how this influences their identity disclosure, also referred to as outness. Using an ANOVA model to understand how different racial identities report their outness, Garvey et al. (2018) discovered that Latinx and multiracial students indicated significantly higher rates of identity disclosure compared to those who identified as Black/African American and Asian/Pacific Islander/Desi American. This study also outlined how factors such as involvement in LGBTQ student organizations and how many LGBTQ people that individuals knew positively impacted outness. Important to note, Garvey et al. (2018) grouped together queer and trans\* students of color in their analyses, which can obscure the differences that may

exist between gender identity and sexuality. For this reason, the present study adds a valuable distinction to higher education professionals' understanding of outness by solely examining the differences within LGBTQ+ populations. The following section showcases the conceptual framework that guided this research and how we explored our central research question.

### **Conceptual Framework**

The Model of Multiple Dimensions of Identity (MMDI; Jones & McEwen, 2000), together with critical quantitative influences (e.g., Kilgo, 2016; Stage, 2007; Stage & Wells, 2014; Wells & Stage, 2014), formed the conceptual framework for this study. To begin, the MMDI served as an important foundation for this research because of its focus on how students' various identity dimensions intertwine (e.g., their race and sexuality; Jones & McEwen, 2000). The MMDI contends that students' social identities must be understood in relation to one another and should not be explored in isolation. This research thus considers how two salient identities can intersect and inform individuals' experiences in college. Additionally, Jones and McEwen (2000) argued that the "particular salience of identity dimensions depended upon the contexts in which they were experienced" (p. 408). Consequently, the MMDI challenged us to consider how students' intersecting racial and sexual identities impacted their view of their collegiate environments, including their perceptions of their sense of belonging on campus and how committed their institutions were to their identities. In addition to the MMDI, the beliefs of critical quantitative research also guided the present research.

*As a Black feminist I look for ways to tell the stories of people in the margins. Providing space to folks to elevate their voice to tell their stories is an important goal I strive to obtain in all my work, even when I may not share the same identities as my research participants.*

*--Dajanae, fourth co-author*

Recent scholarship in higher education has encouraged researchers to envision how critical paradigms can change approaches to quantitative inquiry (see Stage, 2007; Wells & Stage, 2014). For example, Stage (2007) encouraged scholars to “question the models, measures, and analytic practices of quantitative research to offer competing models, measures, and analytic practices that better describe the experiences of those who have not been adequately represented” (p. 33). Critical quantitative approaches bring to light the stories of historically marginalized populations (e.g., subgroups within the LGBTQ+ community) by integrating a critical worldview throughout a study design. This manuscript applies recommendations of critical quantitative scholars in the ways that data were analyzed, employing methods such as effect coding (see Mayhew & Simonoff, 2015) as explained in subsequent sections. Critical quantitative perspectives also emerged as seen in the inclusion of the researchers’ positionality statements, describing how our own worldviews shaped this research.

### **Data**

The data from this study come from the 2017 administration of the National Survey of Student Engagement (NSSE). NSSE annually collects information from hundreds of four-year colleges and universities about first-year and senior students’ participation in programs that institutions provide for their learning and personal development. More specifically, NSSE asks students about their participation in curricular and co-curricular activities, their experiences in their courses, interactions with others, and perceptions of campus support. A subset of 30 participating NSSE institutions received an additional item set asking students about LGBTQ+ issues at their institution. This study focuses on the responses of over 14,000 students who responded to items in this additional set as well as demographic questions about their sexual orientation and racial/ethnic identity.

## Measures

To be included in this study, students had to respond to the demographic questions about sexual orientation and racial/ethnic identity as well as a series of items in the additional LGBTQ+ issues question set. For sexual orientation, students were asked to select which from the following best describes their sexual orientation: *Straight (heterosexual)*; *Bisexual*; *Gay*; *Lesbian*; *Queer*; *Questioning or unsure*; *Another sexual orientation, please specify*; and *I prefer not to respond*. For racial/ethnic identification, students were asked to select all that apply from the following options: *American Indian or Alaska Native*, *Asian*, *Black or African American*, *Hispanic or Latino*, *Native Hawaiian or other Pacific Islander*, *White*, *Other*, and *I prefer not to respond*. Students who chose *I prefer not to respond* for either the sexual orientation or racial/ethnic identification items were omitted from this study.

The additional LGBTQ+ items selected for this study asked students about their institution's commitment to the overall well-being of LGBTQ+ people, students' frequency of "outness," and students' sense of belonging at their institution with respect to their sexual orientation. *Institutional Commitment* was assessed from a single item (Table 1). *Frequency of Outness* was measured with an additive index counting the number of different kinds of people (at least one parent or guardian, student at their institution, faculty member, or staff member) who are aware of the students' sexual orientation. *Sense of Belonging* was measured with a scale created from four items asking about students' agreement with feeling physically safe, feeling comfortable being themselves, feeling valued, and feeling like part of the campus community. For more details about these measures, see Table 1. Although not central to the study, student responses to the open-ended question "Please share any reflections or experiences regarding

LGBQ+ issues at your institution” were included when appropriate to give context to our quantitative findings.

*Representation is critical for understanding individuals' experiences. As a queer man and educator, it is important to me to provide avenues for sharing pieces of one's self then spread those stories through teaching.*

*--Kyle, third co-author*

## **Respondents**

Of the students in this study (n = 14,114), nearly nine in ten (88%) identified as straight, with smaller proportions identifying as bisexual (5%), gay (2%), and the remaining as questioning or unsure, queer, lesbian, or another sexual orientation (1% each). Around three in five (58%) identified as White with smaller proportions identifying as Asian (12%), Hispanic or Latino (10%), Black or African American (12%), Multiracial (8%), or another racial/ethnic identity (2%). For additional information about the respondents in this study by sexual orientation and racial/ethnic identity, see Tables 2 and 3.

Students in this study attended various colleges and universities. Around one in four (26%) students attended Doctoral higher research institutions while few attended Master's-medium programs (1%). Roughly one-half (52%) of students were at Very Large institutions with enrollment of 10,000 or more undergraduate students, and approximately one-sixth (14%) of students were from small institutions with fewer than 2,500 enrollments. Around half of students attended institutions located within cities (54%). When looking at regions of the United States, the Great Lakes were the most represented (37%) while New England was the least represented (4%). For more information about the institutions at which student respondents in this study were enrolled, see Table 4.

### Analyses

*In my experience telling quantitative stories, often with co-authors that hold identities both similar and different from my own or those of the people we study, I've learned that the greatest challenge of my work is to find ways to put people cleanly in boxes and simultaneously to recognize that no one truly fits into a series of boxes. We are all more than any single aspect, or even combination, of our identities.*

*--Allison, first co-author*

A combination of descriptives and a series of OLS regression models were used to answer our study's research question. In each model, one of the dependent outcomes was either *Sense of Belonging*, *Institutional Commitment*, or *Frequency of Outness*. The dependent variables were standardized before entry into models so that unstandardized coefficients can be interpreted as effect sizes. Although control variables are typically added to models to account for additional variation in experiences, we chose to have our models exclusively focus on the relationships within and between racial/ethnic identification, sexual orientation, and our outcomes. We acknowledge that other factors (gender, discipline, etc.) affect students' perceptions, but those factors were not a focus of our exploration.

For the first series of models, only students' sexual orientation and racial/ethnic identity were included in the model. Students' sexual orientation was entered as *Bisexual*, *Gay*, *Lesbian*, *Queer*, *Straight*, *Questioning*, and *Another SO*. Students coded into *Another SO* identified as asexual, pansexual, demisexual, fluid, etc. Students' racial/ethnic identity was entered as *Asian*, *Black*, *Latino*, *White*, *Other*, and *Multiracial*. Students coded into *Other* identified as American Indian or Alaskan Native, Native Hawaiian or other Pacific Islander, Other, etc. For all independent variables, effect coding was used so that comparisons can be made to the average

student as opposed to a reference group (Mayhew & Simonoff, 2015). This allowed us to examine the relationship between sexual orientation, racial/ethnic identification, and our outcomes without centering any one group as a reference for comparison.

A second series of models were run with the inclusion of interaction terms. Interaction terms were created for intersections of students who identified as any LGBTQ+ orientation and each of the different racial/ethnic categories. The coefficients of these interaction terms allowed us to see the unique relationship that racial/ethnic identification has with our outcomes for LGBTQ+ students while controlling for the relationship with racial/ethnic identification and sexual orientation separately. Again, effect coding was used so that no single student categorization is centered as the norm for comparisons.

### Results

Averages and standard deviations for *Sense of Belonging*, *Institutional Commitment*, and *Frequency of Outness* by students' sexual orientation, racial/ethnic identification, and the intersection of LGBTQ+ and racial/ethnic identities can be found in Table 5. Details about model coefficients can be found in Table 6.

**Sense of belonging.** When examining the model without interaction terms, we find variation in students' perceived *Sense of Belonging* by both sexual and racial/ethnic identity. Bisexual students ( $B = .325, p < .001$ ) reported having more than average sense of belonging than students of other sexual orientations and Straight ( $B = -.298, p < .001$ ) students reported feeling less than average. Students identifying as Gay, Lesbian, Queer, Questioning, or another sexual orientation felt an average sense of belonging with respect to their sexual orientation. White ( $B = .163, p < .001$ ) and Hispanic or Latino ( $B = .072, p < .01$ ) students reported feeling a stronger sense of belonging than the average student while Asian ( $B = -.104, p < .001$ ) and Other

( $B = -.100, p < .05$ ) students felt less. Black or African American and Multiracial students felt an average sense of belonging with respect to their sexual orientation. In the second series of models, students identifying as both LGBQ+ and Asian ( $B = .255, p < .01$ ) felt more sense of belonging with respect to their sexual orientation than the average LGBQ+ student and LGBQ+ White ( $B = -.118, p < .05$ ) students felt less.

**Institutional commitment.** When examining the model without interaction terms, we find variation in students' perceived *Institutional Commitment* by both sexual and racial/ethnic identity. In general, Bisexual students ( $B = .127, p < .001$ ) and students identifying with another sexual orientation ( $B = .183, p < .05$ ) felt more commitment from their institution for the well-being of LGBQ+ people than the average student. Students identifying as Queer ( $B = -.187, p < .05$ ) and Straight ( $B = -.264, p < .001$ ) felt less commitment from their institution than average. Students identifying as Gay, Lesbian, or Questioning felt a comparable sense of commitment from their institution for the well-being of LGBQ+ people to the average student. Hispanic or Latino students ( $B = .136, p < .001$ ) and Multiracial students ( $B = .093, p < .01$ ) felt more commitment than the average student, but Asian ( $B = -.062, p < .05$ ), Black or African American ( $B = -.115, p < .001$ ), and White students ( $B = -.056, p < .01$ ) felt this commitment less than the average student. Students identifying with an Other racial/ethnic identity felt a comparable sense of commitment from their institution for the well-being of LGBQ+ people to the average student. In the second series of models, none of the interaction terms showed a unique significant effect for being LGBQ+ and any of the racial/ethnic identities on perceptions of institutional commitment.

**Frequency of outness.** When examining the model without interaction terms, we find variation in the frequency of students' *Outness* by both sexual and racial/ethnic identity. In

general, students who identify as Bisexual ( $B = .765, p < .001$ ), Lesbian ( $B = .418, p < .001$ ), Queer ( $B = .593, p < .001$ ), or Straight ( $B = .316, p < .001$ ) have a higher frequency of different people who are aware of their sexual orientation. Students who identify as Gay ( $B = -.595, p < .001$ ), Questioning or unsure ( $B = -1.016, p < .001$ ), or another sexual orientation ( $B = -.481, p < .001$ ) have a lower frequency of different people who are aware of their sexual orientation. There were not groups statistically similar to the average *Outness* indicating greater variation of outness for all of subgroups. White ( $B = .147, p < .001$ ) and Multiracial ( $B = .083$ ) students had a higher frequency of outness than the average student whereas Asian ( $B = -.192, p < .001$ ) and Black or African American ( $B = -.054, p < .05$ ) students had a lower frequency of outness. Hispanic or Latino and Other racially/ethnically identified students had an average frequency of outness. In the second series of models, we see a unique effect for identifying as both LGBTQ+ and Hispanic or Latino ( $B = -.149, p < .05$ )—these students have a lower frequency of different people who are aware of their sexual orientation.

### **Limitations**

We aspire to do the work of critical quantitative research but realize the limitations to such aspirations. Quantitative research requires large sample sizes to conduct analyses. Given the small population of LGBTQ+ students, racial minority students, and the intersection of the two, it can be difficult to examine students' experiences. By aggregating the data, the researchers were able to find significant differences, however, we recognize that this can minimize individual student voices. There were choices that had to be made when creating a comparison group for statistical procedures: select a dominant demographic, another group, or an average student. To prevent further hegemony of one group, the research team chose to use effect coding to create an average student to attempt to control for student characteristics and to center non-dominant

student voices (Teranishi, 2007). Straight, White, and Straight White students may still be overrepresented due to sheer volume of these respondents. The research focused on the intersections of sexual orientation and race/ethnicity however, our models did not account for other identities (gender, disability, etc.). We are hopeful to continue to research these topics and believe we have moved the needle to help other researchers hone their practices.

### **Discussion**

The results from this research contribute significantly to higher education scholarship in numerous ways. To begin, this study emphasizes that researchers must continue to take a critical approach to quantitative methods. By disaggregating data to comprehend the differences that exist within the LGBTQ+ community, this research allows higher education practitioners to better program and support groups on college campuses. The findings also underscored the reality that students' multiple social identities must be understood in conjunction with one another rather than additively, as articulated by the conceptual framework (see Jones & McEwen, 2000). To further illuminate how the study results fill a necessary gap in extant scholarship, the following sections will examine the three outcomes in greater detail and their relationship to the current literature. Of note, to align with our research question, we explore the results pertaining to differences in sexualities for those within the LGBTQ+ community and at the intersections of race and sexuality.

#### **Sense of Belonging**

This study showcased that belongingness can differ by sexuality subgroups, specifically for bisexual individuals. Specifically, compared to the average student, bisexual collegians reported a higher sense of belonging. Interestingly, Longerbeam et al.'s (2007) study found that gay men had a stronger sense of belongingness than others in the LGBTQ+ community, including

those who were bisexual. What this may show is that when compared to students of *all* sexualities, perceptions of belongingness may differ for bisexual collegians specifically. Furthermore, results indicated that LGBQ+ Asian students have a positive relationship with this outcome and LGBQ+ White students have a negative relationship with sense of belonging. Concerning the first significant relationship, existing scholarship has shown that LGBQ+ Asian students may feel more comfortable on campus expressing their sexual identities compared to their home communities (see Narui, 2014; Strayhorn, 2014), which could explain their stronger sense of belonging on campus.

*It is 100 times better than the outside world.*

*--An open-ended question response by a Bisexual Asian student*

Conversely, LGBQ+ White students were seen to report lower levels of belongingness. Though it is difficult to ascertain why this might be the case, research has shown that LGBQ+ White collegians can fail to understand how their racial privilege intersects with their sexuality (Miller & Vaccaro, 2016). Interpreting this result using a critical perspective challenges us to consider how LGBQ+ White students may simultaneously feel a lower sense of belonging, while not noticing some of the privileges they experience due to their White identity. This reinforces the importance of providing avenues for students to explore their multiple identities in unison, including those with privileged identities within the LGBQ+ community.

### **Institutional Commitment**

Significant differences also emerged when it came to the measure of institutional commitment. Like the outcome of belongingness, bisexual students reported higher scores on institutional commitment. In examining the literature on belongingness, this pattern might be explained because belongingness typically results from individuals feeling as though their

institution is investing in them and that they matter to their institution (Strayhorn, 2012). Students with other sexual orientations may also perceive their campuses as being more committed to the LGBTQ+ community, which can explain their significant positive perceptions of institutional commitment. Still, queer individuals indicated lower levels on this outcome. Though not possible to explain within this study, this finding might be a result of queer students sensing that their institutions cater more towards gay, lesbian, and bisexual individuals rather than those who identify as queer.

Lastly, no significant findings emerged in institutional commitment for the interactions between race and sexuality. It may be that individuals perceive their institutions to be equally supportive to all racial groups within the LGBTQ+ community. However, this finding can also signal that students see their campuses to be not supportive of sexuality. As previous studies have argued (e.g., Harris, 2003; Patton & Simmons, 2008; Peña-Talamantes, 2013), a narrative around the inaccessibility of resources and programs frequently exists, which could point to the latter interpretation.

### **Outness**

Additionally, this research revealed that frequency of outness varies by sexualities within the LGBTQ+ community. Gay and questioning individuals specifically reported lower rates of outness than the average student. For questioning individuals, the frequency of outness may be low due to their exploration of their own identities, wanting to comprehend one's self before sharing one's identity with others. Gay students may also be hyperaware of the stigma that results from identifying as part of the LGBTQ+ community (Rankin et al., 2010), thus also affecting their degrees of outness to others.

Moreover, the regression analyses demonstrated that LGBTQ+ Latinx students have a unique negative relationship with outness. In other words, when compared to the average, collegians who identify as both Latinx and as a part of the LGBTQ+ community report lower degrees of outness. This result differed from Garvey et al.'s (2018) study in which they found that students who identified as queer and trans\*, as well as Latinx, had higher rates of identity disclosure. Yet, it is imperative to remember that Garvey et al.'s (2018) research included both queer and trans\* collegians in their sample, rather than focusing explicitly on those who identify as LGBTQ+. Therefore, we turn to the current literature to help explain the current finding that LGBTQ+ Latinx are less likely to be out. In fact, scholars have shown that LGBTQ+ Latinx students may struggle with coming out due to the cultural beliefs around sexuality that exist in Latinx culture (see Duran & Pérez, 2017; Eaton & Rios, 2017). Scholarship has noted that LGBTQ Latinx individuals navigate cultural contexts that may be deeply engrained in religious beliefs or in heteronormativity (Eaton & Rios, 2017), which in turn could prevent collegians from feeling comfortable to be out to others. Creating environments where these students feel comfortable to explore the intersections of their identities as parts of the same coin should be a priority of institutions.

### **Implications**

This research has significant implications for professionals in higher education and can inform practices on college campuses to contribute to their missions. Specifically, the findings serve as an important foundation for professionals to target certain populations in college through programming and outreach. For example, in knowing that LGBTQ+ Latinx students are less likely to be out to individuals on campus, practitioners can plan events that discuss what it means to be out as an LGBTQ+ Latinx individual. This can take the form of panels, invited

speakers, or even through film screenings. Ultimately, these students may be seeking for examples of people who have successfully made meaning of their multiple intersecting identities. Similarly, the findings highlighting that students who identify as queer indicated lower scores of institutional commitment communicating that they are not receiving crucial support in their identities. It may be that colleges and universities may be programming for lesbian, gay, and bisexual collegians without an attention to those who identify with other sexualities such as queer. As a result, institutional offices must take intentional steps to be inclusive of those who represent different subgroups within the LGBTQ+ community. These are a couple examples of how the findings from this quantitative study influenced by a critical paradigm can translate into more equitable approaches to student affairs practice.

Additionally, knowing that every intersection between race and sexuality was not significant for institutional commitment can either be positive or negative. Though inconclusive in the scope of the present study, we encourage professionals to think about the ways that their institutions are committed to their LGBTQ+ students with a specific attention to racial identity. Administrators should reflect on the history of their institution to see where they have been successful in inclusion and where exclusion still permeates (Milem, Chang, & Antonio, 2005), especially within LGBTQ+ spaces. Infusing intersectional perspectives in the curriculum, organizational structures, and policies will similarly make a richer environment for LGBTQ+ students of color.

*Largely, aside from the typical prejudice and microaggressions that accompany navigating heteronormative spaces as a queer person, I would say there's a lack of representation and intersectionality of LGBTQ+ issues and history across all courses I have taken at [my institution].*

*--An open-ended question response by a Queer Latinx student*

By centering diverse sexualities and races in academic and student affairs, institutions can show students within the LGBTQ+ community that they matter and are valued. Centers dedicated to supporting students based on identity can begin to create programming and resources to support students with intersecting identities. Students could benefit greatly from assistance with navigating particularly tricky intersections.

In addition to having strong implications for practitioners, researchers can benefit from this research. Specifically, this study underscores the necessity to view marginalized groups in monolithic ways. As critical quantitative approaches emphasize, scholars must push beyond traditional approaches to analyzing quantitative data (Stage, 2007; Wells & Stage, 2014). By interacting race and sexuality in the present research, higher education practitioners are better equipped to work with LGBTQ+ communities. Thus, future research must further identify how data can be disaggregated for more equitable means. For example, studies can try to ascertain how other identities influence the experience of LGBTQ+ students.

*As an LGBTQ immigrant, I do not believe that there is enough work/efforts by the institution to recognize the specific disenfranchisement of my community. The institution refused to declare the campus a sanctuary space and this directly affects both immigrants, and LGBTQ immigrants!*

*--An open-ended question response by a Queer Latinx student*

Comments such as these articulate the necessity to expand our perspectives, methods, and approaches to see collegians in holistic manners. This study was about the intersections of sexual and racial/ethnic identities, but there are many other characteristics of students and the student experience that can affect perceptions and experiences. This study may serve as a baseline for examining sense of belonging, sense of institutional commitment, and frequency of outness with

other intersections of identity or by using different data sources and methodologies to give us a better sense of when and how these experiences are shaped. Although this study attempts to examine the impacts that sexual and racial/ethnic identities have on important collegiate outcomes, why these relationships occur are well beyond the scope of this study. This study should be considered a support for future research to examine why these differences arise and ways to create safe and supportive spaces for all students. Quantitative methodologists should additionally continue work to find better ways of categorizing people by identity characteristics, to create and use methods that don't always normalize majority identities, and to respect that quantitative stories can be told with small numbers of people.

### **Conclusion**

To continue to support students in equitable and just ways, institutions must increasingly comprehend how individuals' intersecting identities uniquely affect their experiences on college campuses. Specifically, as professionals continue to initiate programs and services for LGBTQ+ communities, they must resist the temptation to see this population as homogenous. In fact, findings from the present study revealed how different subgroups within the LGBTQ+ community report their experiences with belongingness, institutional commitment, and outness. Consequently, these results can guide how practitioners interact with students who identify as part of the LGBTQ+ community, understanding how other identities may uniquely influence their time in higher education. By bringing attention to these nuances within marginalized communities, the field of higher education can create better support structures for LGBTQ+ collegians.

Table 1. Outcome Descriptives and Component Items

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Sense of Belonging	
<b>With respect to your sexual orientation (straight, LGBTQ+, etc.), to what extent do you agree or disagree with the following statements?</b>	N = 13,149
60 = <i>Strongly agree</i> , 50 = <i>Agree</i> , 40 = <i>Somewhat agree</i> , 30 = <i>Somewhat disagree</i> , 20 = <i>Disagree</i> , 10 = <i>Strongly disagree</i>	Range 0-60
	M = 47.82
	SD = 10.73
a. I feel physically safe at my institution	
b. I feel comfortable being myself at my institution	Cronbach's $\alpha$ = .84
c. I feel valued by my institution	ICC = .031
d. I feel like part of the campus community	
Institutional Commitment	
<b>To what extent does your institution demonstrate a commitment to the overall well-being of LGBTQ+ people?</b>	Frequency of commitment:
4 = <i>Very much</i> , 3 = <i>Quite a bit</i> , 2 = <i>Some</i> , 1 = <i>Very little</i> ;	5.8% <i>Very little</i>
<i>Don't know</i> (coded as missing)	19.8% <i>Some</i>
	28.9% <i>Quite a bit</i>
	24.4% <i>Very much</i>
	19.9% <i>Don't know</i>
	N = 10,451
	Range 1-4
	M = 2.91, SD = .920
Frequency of Outness	
<b>To the best of your knowledge, which of the following people are aware of your sexual orientation? (Please respond yes or no.)</b>	Frequency of outness:
1 = <i>Yes</i> , 0 = <i>No</i>	3.0% Zero
a. At least one parent or guardian	5.8% One
b. At least one student at this institution	21.5% Two
c. At least one faculty member	8.2% Three
d. At least one staff member	61.5% Four
	N = 13,171
	Range 0-4
	M = 3.1942, SD = 1.14

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Table 2. Select Student and Educational Characteristics by Sexual Orientation

		Percentages						
		Bisexual	Gay	Lesbian	Queer	Straight	Questioning	Another SO
Racial/ethnic identification	Asian	6.7	9.3	4.6	5.3	12.7	10.8	2.9
	Black or African American	5.5	6.0	9.8	5.3	9.2	8.4	4.1
	Hispanic or Latino	11.3	13.9	7.8	6.5	10.0	10.8	9.9
	White	61.0	55.2	60.8	65.9	58.0	54.7	63.7
	Other, Am Indian or AK Native, Native HI or other PI	2.8	2.1	3.3	2.9	2.3	2.0	2.9
	Multiracial	12.7	13.5	13.7	14.1	7.8	13.3	16.4
Gender identity	Man	17.2	92.5	< 1	8.2	34.6	19.2	8.8
	Woman	78.2	5.0	94.8	54.7	65.0	78.8	71.3
	Another gender identity	2.4	1.4	4.6	27.6	< 1	< 1	14.0
	I prefer not to respond	2.2	1.1	< 1	9.4	< 1	1.5	5.8
First-generation		37.9	42.7	47.4	28.8	40.9	36.1	35.7
Major field	Arts & Humanities	26.1	22.9	19.1	34.9	10.8	27.1	31.6
	Biological Sciences, Agriculture, & Natural Resources	11.9	11.5	10.5	7.7	12.6	12.3	15.2
	Physical Sciences, Mathematics, & Computer Science	6.8	6.5	4.6	6.5	7.2	5.9	9.9
	Social Sciences	19.4	13.3	18.4	26.6	13.1	17.2	16.4
	Business	7.9	15.4	4.6	3.0	18.3	11.8	7.0
	Communications, Media, & Public Relations	5.5	9.3	5.9	4.7	4.2	2.5	1.2
	Education	3.7	3.9	2.0	3.0	5.8	6.4	3.5
	Engineering	5.2	5.0	7.9	2.4	8.2	5.4	1.8
	Health Professions	6.8	3.9	9.2	4.1	10.3	5.9	2.3
	Social Service Professions	3.7	1.4	9.9	1.2	3.7	1.5	< 1
	All Other	3.1	6.8	7.9	5.9	5.7	3.9	10.6
Transfer student		26.0	38.6	34.0	29.4	28.9	20.7	21.8
Living on campus		45.1	40.5	37.9	51.2	41.6	55.9	61.2
		Averages						
Age		21.4	23.7	23.4	21.8	22.5	20.3	20.9
Estimated GPA		3.41	3.53	3.45	3.48	3.44	3.46	3.50

Table 3. Select Student and Educational Characteristics by Racial/Ethnic Identification

		Percentages					
		Asian	Black or African American	Hispanic or Latino	White	Another racial/ethnic identity	Multiracial
Sexual orientation	Bisexual	2.8	3.1	5.7	5.3	6.0	7.6
	Gay	1.5	1.4	2.7	1.9	1.8	3.2
	Lesbian	0.4	1.2	0.8	1.1	1.5	1.8
	Queer	0.5	0.7	0.8	1.4	1.5	2.0
	Straight	93.1	91.6	87.3	87.6	86.4	80.8
	Questioning or unsure	1.3	1.4	1.5	1.3	1.2	2.3
	Another sexual orientation	0.3	0.6	1.2	1.3	1.5	2.3
Gender identity	Man	38.4	31.4	32.2	33.2	37.4	32.9
	Woman	61.0	67.9	66.8	65.3	61.1	63.9
	Another gender identity	0.3	0.2	0.4	1.1	0.9	2.4
	I prefer not to respond	0.3	0.5	0.6	0.5	0.6	0.8
First-generation	41.6	58.9	74.4	31.2	44.3	42.8	
Major field	Arts & Humanities	9.4	7.8	12.7	13.7	13.6	15.6
	Biological Sciences, Agriculture, & Natural Resources	17.7	12.9	11.4	11.1	17.0	14.2
	Physical Sciences, Mathematics, & Computer Science	11.2	3.1	6.7	7.0	5.6	7.7
	Social Sciences	10.8	14.4	15.0	13.8	13.6	15.2
	Business	20.9	16.5	15.6	17.4	13.6	13.5
	Communications, Media, & Public Relations	3.3	4.1	5.7	4.3	5.9	4.4
	Education	2.5	6.5	4.2	6.5	4.0	4.8
	Engineering	8.9	6.1	7.9	7.9	8.6	6.8
	Health Professions	9.2	11.6	9.3	10.0	9.0	7.9
	Social Service Professions	1.4	10.5	5.8	2.7	4.3	3.3
All Other	4.7	6.4	5.6	5.6	4.9	6.7	
Transfer student	27.8	38.3	41.3	24.6	37.2	32.4	
Living on campus	31.2	42.4	22.0	49.0	27.9	38.9	
		Averages					
Age		21.7	24.7	23.0	22.1	23.6	22.1
Estimated GPA		3.46	3.21	3.31	3.51	3.38	3.37

Note: Another racial/ethnic identity refers to students who selected Other, American Indian or Alaska Native, or Native Hawaiian or other Pacific Islander

Table 4. Percentages of Students Enrolled at Institutions with Select Institution Characteristics

Carnegie classification	Doctoral highest research	14.9
	Doctoral higher research	26.1
	Doctoral moderate research	13.5
	Master's-large programs	12.3
	Master's-medium programs	1.2
	Master's-small programs	6.8
	Baccalaureate-A&S	19.2
	Baccalaureate-diverse programs	6.0
Institution size (undergraduate enrollment)	Small (fewer than 2,500)	18.6
	Medium (2,500-4,999)	14.2
	Large (5,000-4,999)	14.8
	Very large (10,000 or more)	52.3
Barron's selectivity	Less competitive	3.7
	Competitive	42.1
	Very competitive	21.2
	Highly competitive	25.2
	Most competitive	7.8
Institution locale	City	53.9
	Suburb	10.3
	Town	33.4
	Rural	1.9
Institution region	New England	3.7
	Mid East	22.6
	Great Lakes	36.9
	Plains	5.4
	Southeast	11.6
	Southwest	10.8
	Far West	8.8

Table 5. Descriptive Results for Outcome Measures by Sexual Orientation and Racial/Ethnic Identification

		Sense of Belonging		Institutional commitment		Frequency of Outness	
		Mean	SD	Mean	SD	Mean	SD
Sexual orientation	Bisexual	44.42	11.79	2.84	.95	1.82	1.17
	Gay	45.77	12.82	2.90	.97	2.95	1.22
	Lesbian	44.02	10.77	2.64	.97	3.17	1.04
	Queer	41.64	12.37	2.57	.92	2.86	1.13
	Straight	48.29	10.48	2.93	.91	3.34	1.03
	Questioning or unsure	44.80	11.73	2.83	.99	1.31	1.10
	Another sexual orientation	45.67	11.45	3.01	.82	1.93	1.27
Racial/ethnic identification	Asian	46.00	10.35	2.89	.89	2.96	1.32
	Black or African American	46.49	11.32	2.83	.99	3.10	1.24
	Hispanic or Latino	47.67	10.29	3.06	.89	3.11	1.18
	White	48.63	10.55	2.88	.91	3.28	1.06
	Another racial/ethnic identity	45.73	12.60	2.94	.99	3.11	1.22
	Multiracial	46.83	11.40	3.01	.94	3.13	1.13
LGBQ+ & Racial/ethnic intersection	LGBQ+ & Asian	45.64	11.52	2.95	1.01	1.90	1.36
	LGBQ+ & Black or African American	42.52	13.40	2.68	.99	2.00	1.32
	LGBQ+ & Hispanic or Latino	44.74	11.97	2.97	.95	1.97	1.29
	LGBQ+ & White	44.56	11.56	2.78	.94	2.25	1.30
	LGBQ+ & another racial/ethnic identity	42.27	13.54	2.71	.96	2.39	1.42
	LGBQ+ & multiracial	44.75	12.66	2.93	.93	2.26	1.33

Note: Sense of Belonging is a scale of four items ranging from 0-60. Institutional Commitment is a single item ranging from 1-4. Frequency of Outness is an additive index of four items ranging from 1-4. See Table 1 for component items and scale information.

Table 6. Regression Coefficients for Models with and without Interaction Terms for Sexual Orientation and Racial/Ethnic Identity

	Sense of Belonging				Institutional Commitment				Frequency of Outness			
	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.	B	Sig.
Constant	-.365	***	-.323	***	-.083	**	-.087	*	-.702	***	-.672	***
Interactions												
LGBQ+*Asian	--	--	.255	**	--	--	.188		--	--	.025	
LGBQ+*Black	--	--	-.105		--	--	-.039		--	--	-.083	
LGBQ+*Latino	--	--	-.022		--	--	-.004		--	--	-.149	*
LGBQ+*White	--	--	-.118	*	--	--	.001		--	--	-.058	
LGBQ+*Other	--	--	-.078		--	--	-.178		--	--	.235	
LGBQ+*Multi	--	--	.068		--	--	.031		--	--	.029	
Racial/Ethnic Identity												
Asian	-.104	***	-.120	***	-.062	*	-.080	**	-.192	***	-.190	***
Black	-.051		-.040		-.115	***	-.114	**	-.054	*	-.044	
Latino	.072	**	.073	**	.136	***	.134	***	.002		.022	
White	.163	***	.177	***	-.056	**	-.059	**	.147	***	.156	***
Other	-.100	*	-.091		.004		.033		.014		-.020	
Multiracial	.020		.001		.093	**	.085	*	.083	**	.076	**
Sexual Orientation												
Bisexual	.325	***	.278	***	.127	***	.135	***	.765	***	.728	***
Gay	-.050		-.040		.024		.022		-.595	***	-.587	***
Lesbian	.086		.084		.084		.076		.418	***	.427	***
Queer	-.083		-.068		-.187	*	-.181	*	.593	***	.598	***
Straight	-.314	***	-.298	***	-.264	***	-.264	***	.316	***	.320	***
Questioning	.017		.009		.032		.025		-1.016	***	-1.010	***
Another SO	.019		.035		.183	*	.186	**	-.481	***	-.476	***

Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ . Effect coding was used so that students can be compared to the average student in the model as opposed to a reference category. Outcomes were standardized before entry into models so that unstandardized coefficients can be interpreted as effect sizes. Students coded into Another SO identified as asexual, pansexual, demisexual, fluid, etc. Students coded into Other identified as American Indian or Alaskan Native, Native Hawaiian or other Pacific Islander, Other, etc.

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