# Beyond the Binary: Gender Image and Experiences of Marginalization on Campus

Kari J. Dockendorff
*Colorado State University*

Claudia Geist
*University of Utah*

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# Beyond the Binary

## Gender Image and Experiences of Marginalization on Campus

**Kari J. Dockendorff**, *Colorado State University*
**Claudia Geist**, *University of Utah*

— **Abstract** —

This study explores levels of gender marginalization on college campuses in order to better understand who is at risk of being marginalized. In addition to conventional measures of sex, and gender, we explore scaled measures of how students see themselves, and how they think others see them, with respect to masculinity, femininity, and androgyny. In a survey distributed to undergraduate students, we explore experiences of gender microaggressions across the campus including experiences with pronouns, bathrooms, and interactions with staff and faculty. What we find is that marginalization based on gender is experienced by all students of all genders. Students who do not identify as transgender also experience microaggressions based on how others view their gender. Studies that aim to understand student experiences on the college campus, categorical measures of gender fall short of capturing a deeper understanding of gender identity and how those genders experience the campus.

Keywords: genderism, transphobia, quantitative methods, survey methods

Institutions of higher education, as reflections of the greater U.S. society, are sites that institutionalize genderism and transphobia through policies, practices, and structures. Transphobia and genderism embedded within the institution send explicit and implicit messages to students on which genders free to move about the campus and which genders do not exist. These cultural norms, as well as any place on campus segregated by sex, limit trans* students' access to and experience with a healthy campus climate (Marine, 2017). The experiences of genderism and transphobia, however, have far-reaching effects that can shape the college experience of students who may not identify as trans*, but who express their genders outside the narrow bounds of gender normativity. Currently, areas of higher education are limited in how they measure and understand gender, and so, areas of campus lack a full understanding of how students of various gender expressions and identities experience the effects of genderism and transphobia.

Survey instruments typically fall short of capturing nuanced gender identities, but they still serve as a mechanism for "analyzing the representativeness and operationalization of social identities in higher education" (Garvey et al., 2019, p. 2). Furthermore, college admissions forms typically only ask for students' sex assigned at birth with two categorical options of male or female, excluding those with intersex identities. Thus, to measure gender through survey research, students who identify beyond the gender binary do not have adequate options to select. When admissions applications include gender, oftentimes, gender is limited to a binary option of "man" or "woman" with a third option of "other." Although the inclusion of "other" as an option may seem like a good move for the application, the notion of other further marginalizes people with genders beyond "woman" or "man" (Compton et al., 2018). Facilities on campus, including bathrooms, locker rooms, campus housing, athletics, and Greek life, are also commonly segregated by sex, reinforc-

ing the notion that only two genders—man and woman—are allowed on campus (Beemyn, 2005; Marine, 2017). Thus, these measures of categorizing students either in surveys or physical campus spaces serve as mechanisms that erase trans* and gender nonconforming students from campus. Genderism and transphobia include experiences such as gender policing and harassment, and students who identify as cisgender but whose gender expressions do not fit normative expressions may also experience genderism and transphobia within sex-segregated spaces on campus.

For this study, our primary goal is to begin to understand the complex nature of gender identity and experiences of genderism and transphobia on college campuses through quantitative measures. Through the use of survey methodology and quantitative data, we seek to illustrate how more complex measures of gender identity and expression can provide a more nuanced approach to understanding campus climate in terms of gendered experiences. In addition to conventional measures of sex and gender, we explore new, scaled measures of how students see themselves and think others see them with respect to masculinity, femininity, and androgyny (Jourian, 2015; Magliozzi et al., 2016). Our goal is to use the scaled measures of gender identity and expression to show that binary gender measures fall short of capturing the fluidity of gender identity.

## Background

In the literature review that follows, we discuss gender and genderism and how they influence student experiences on campus. We then describe gender-based microaggressions and campus climate literature. Finally, we highlight some areas of LGBTQ+[1] research in higher education which call for new approaches to collecting quantitative research on trans* students,

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[1] Throughout this paper, we use LGBTQ+ as an umbrella term to refer to sexuality and genders that are not cisgender and/or heterosexual, except when referring to another study or article that uses a different variation of the LGBTQ+ moniker.

and more broadly, LGBTQ+ students.

## The Measurement of Gender and Genderism

Gender is socially constructed, and we rely on others to interpret our gender (Butler, 2004; Westbrook & Schilt, 2014). Gender identity refers to how someone views themselves, whereas gender expression is the outward display of one's gender (Garvey & Rankin, 2015). An individual never does gender alone, but depends on others to interpret their gender presentation, and, "when people do gender in interactions, they present information about their gender. Others then interpret this information, placing them in gender categories and determining their gender" (Westbrook & Schilt, 2014, p. 33). People must navigate the gendered expectations of others while they perform their gender (Brumbaugh-Johnson & Hull, 2019). Thus, we can never wholly claim our own gender identity because we rely on others to interpret our performance of our gender through our identity and expression. Additionally, gender expression and identity, as well as the interpretation of gender, are wholly tied to race and ethnicity. Gender expression and identity vary and are understood alongside individuals' race, culture, and context (Nicolazzo, 2016a; Stewart, 2017; Stewart & Nicolazzo, 2018). Thus, how colleges and universities in the United State interpret gender is largely rooted in whiteness and euro-centric norms (Nicolazzo, 2016a; Stewart, 2017; Stewart & Nicolazzo, 2018). As a result of these systems and structures in place on college campuses, including admissions applications, campus information systems, and binary structures such as bathrooms, the institution makes it impossible for genders outside of the male/female binary to exist (Spade, 2011; Wentling, 2015).

Spade (2011) refers to the erasure of gendered possibilities as administrative violence. When institutions make certain genders impossible or invisible, the people who embody those genders lose access to resources and life chances (Spade 2008, 2011). Since postsecondary institutions are a microcosm of larger

society, colleges and universities reproduce this administrative violence. Reducing gender identity to a binary categorical measure of male or female limits resources on campus. When students who fall outside the gender binary are not counted on campus, there may not be adequate resources available for them through campus counseling centers or student health centers. Campus policies that only allow students to change their gender on student records if the student has undergone medical procedures (e.g., hormone therapy, surgery) reinforce the notion that everyone must identify as either male or female and must physically transition, which is not always the desire of the individual (Beemyn, 2005; Catalano, 2015). In addition to requiring unnecessary surgical procedures, students who want medical interventions may not have access to or money for such procedures while attending school (Catalano, 2015).

Another way administrative violence can occur within institutions, specifically within areas of student affairs, is by using students' incorrect names and/or pronouns. Referring to a student by the wrong name or pronoun can send them the message that they do not belong on campus or are invisible to staff and faculty with whom they interact (Marine, 2017; Nicolazzo, 2017). A student's sense of belonging in college is crucial for many reasons, including student retention and degree completion (Chang & Leets, 2018). Using students' correct pronouns and/or names can help them feel like they belong on campus. Moreover, misgendering the student or using the wrong name may out that student to others and create an unsafe learning environment (Change & Leets, 2018; Marine, 2017; Nicolazzo, 2017).

Gender norms regulate everyone's lives, not just transgender or gender-nonconforming students (Nicolazzo, 2017). Genderism is another term to describe the regulation of gender norms that occurs when sex and gender are conflated. This socially constructed belief asserts that the continued process of assigning sex at birth supports male/man and female/woman as the only two options an individual

is assigned (Beemyn, 2005; Nicolazzo, 2016b). Categorically defining gender eliminates the possibility of genders outside of the binary, effectively erasing trans* and nonbinary genders (Bilodeau, 2009; Jourian; 2015). The ways through which genderism is (re) produced within higher education not only impacts trans* and nonbinary students, but also all students in how they practice their genders on campus.

One main reason for centering genderism within this study is that it is institutionalized and dictates which gendered possibilities are real on the campus. Genderism can influence all students, and gender-policing extends to non-normative gender expressions. It is important to note here that it is not our aim to state that all cis-identified students experience genderism and transphobia as their trans* peers. Instead, we aim to illustrate that some of the effects of transphobia affect students who, although may identify as cisgender, appear gender nonconforming to others. As we point out throughout this study, gender is complex and fluid, and thus, comparing binary categories such as cisgender students to trans* students misses the complexity in how students perform their genders. In attempting to measure varying levels of femininity, masculinity, and androgyny across all genders, institutions can start to disrupt some of the ways genderism functions on campus by allowing for more gendered possibilities across the student population.

## Microaggressions

Microaggressions, described as, "subtle forms of discrimination in which brief, daily behavioral, verbal, or environmental injustices may occur", originally described covert experiences of bias based on race and racism" (Chang & Chung, 2015, p. 218). Microaggressions also manifest themselves in other systems of oppression, including the experiences of LGBTQ+ people, and specifically trans* and nonbinary individuals (Chang & Chung, 2015; Nadal, 2019; Pitcher, 2017). Further, microaggression can affect all genders, from those who identify as gender queer and trans* to those who identify as cisgender but whose appearance

may not meet normative gender expectations (Journell, 2017; Nicolazzo, 2017; Wentling, 2015). For trans* individuals, one of the most common forms of microaggressions when someone misgenders them through the incorrect use of names and/or gender pronouns (Journell, 2017; Nadal et al., 2010; Pitcher, 2017). The experience of being called the wrong name or pronoun may seem simple and insignificant to some, but to those who experience these acts regularly, it can feel violent (Kohli & Solorzano, 2012). These misgendering experiences can happen in the classroom, office, or anywhere on campus. Calling a student by the wrong name or pronoun in the classroom or other public space can also "out" that student to others in a space where they may not feel safe sharing their gender identity.

An important point to note here with gender-based microaggressions is that these experiences affect those who may or may not identify as trans*. Since gender, as described above, is a social construct, an individual's outward performance of their gender may not align with society's expectations of their gender (Butler, 2004) and, thus, that individual may not seem to "fit" the space, such as the bathroom. In other words, how people interpret others' gender expression may lead to gender-based microaggressions whether or not that individual identifies as trans* (Jourian, 2015; Nadal, 2019). Thus, studies that position individuals' gender as either trans* or cisgender, even if they take into account different gender identities, may not account for how others perceive their gender. As a result, these studies fail to capture the nuance and depth of the fluidity of gender and how others' interpretation of those identities may influence individuals' experience on campus.

## Campus Climate

Studies on campus climate aim to understand how students view their institutional environment and the "current attitudes, behaviors, and standards of practices" (Rankin & Reason, 2008, p. 264) of the campus community. Campus climate studies specifically

focused on trans*, nonbinary, and LGBTQ+ students more broadly find that the campus remains mostly hostile or unwelcoming to these groups of students in comparison to cisgender or heterosexual students (Garvey & Rankin; 2015; Rankin et al., 2010; Vaccaro, 2012). In their campus climate study of LGBT students, faculty, and staff, Rankin et al. (2010) found that LGB students experienced higher levels of harassment than their heterosexual peers, and trans* and nonbinary students experienced higher levels of harassment than their cisgender peers. While our study does not solely focus on trans* student experiences, we argue that campus climate studies, as well as others that study cisgender students in comparison to trans* students, fail to capture the nuance of gendered experiences on the college campus. In other words, simple comparisons of cisgender student experiences to trans* student experiences miss the complexity and fluidity of experiences based on students' gender identities and expressions.

## LGBTQ+ Students in Research in Higher Education

Research on LGBTQ+ students in higher education often treats all identities that fall under the umbrella of LGBTQ+ as one monolithic group (Marine & Catalano, 2014; Marine & Nicolazzo, 2014). Lesbian, gay, and bisexual identities are based on individuals' sexuality, whereas trans* and nonbinary identities are based their gender, gender identity, and gender expression. Because of the conflation of sex, gender, sexuality, gender identity, and gender expression, "trans identity is often mistaken as a sexual orientation, when in fact it is a gender identity and/ or a form of gender expression" (Marine & Catalano, 2014, p. 136). Using the LGBTQ+ umbrella as one monolithic group also (re)produces and maintains the gender binary by reinforcing trans* identities as either male or female.

Some of the earlier research focused on trans* and nonbinary students aimed to show how (a) trans* and nonbinary students experience the college campus,

(b) gender is institutionalized within the campus environment, and (c) the campus environment provides the most significant set of obstacles for trans* and nonbinary students (Beemyn, 2005; Bilodeau, 2009). Gender-neutral bathrooms are one strategy to allow trans* students to use the bathroom without having to "pass" as cisgender enough to use the male or female bathroom (Mathers, 2017). These physical structures, as mentioned above, within the campus environment isolate and restrict trans* and nonbinary students and indeed all students, while failing to address the inherent genderism within these structures.

In their study of transgender student experiences in the classroom, Garvey and Rankin (2015) call for better ways to conduct quantitative research of gender identity on college campuses to better understand who these students are and where they are on campus. Yet, quantitative studies on trans* students remain lacking since, as Renn (2010) points out, most colleges and universities do not include demographic questions on sexuality or gender identity. Surveys and other strategies for data collection focused on limiting categorical measures of gender exclude the diversity and lived experiences of a range of gendered possibilities and limit research on student experiences (Mayo, 2017). A scaled measure of gender opens up the possibilities of gender identity and expression and allows quantitative data to push beyond a trans*/cis binary. Instead of collapsing categorical gender identities and comparing gendered experiences between trans* and cis students, a more fluid approach to exploring gender-based experiences is possible. Additionally, due to the conflation of sex with gender discussed earlier in this paper, students with nonnormative gender expressions are also assumed to experience homophobia (Butler, 2004). In reality, sexuality does not offer reliable clues about how students experience campus based on their gender identities and expressions. Through categorical measures of gender identity, cisgender students are often compared to trans* students. Our study seeks to disrupt this binary measurement of gender and sexuality and complicate how

gender is measured and understood in the context of higher education.

## The Present Study

Our study expands existing research by using a more complex quantitative measure of gender identity and expression to understand how students experience genderism and transphobia on college campuses. Typically, campuses gather data on students that allow students to indicate their gender as either male or female. As discussed earlier, this gender categorization is based on sex assigned at birth and erases students whose gender does not fall neatly into a binary gender category. Thus, our contribution with this project is to develop multidimensional gender measurements that include multiple measures of gender identity as well as scales representing perceived interpretation of gender by others to study the gender diversity of college students. The two central research questions guiding this study were:

1.  How do experiences of gender marginalization on campus vary across known categories of gender?

2.  How do scaled measures of gender image provide additional understanding to variation in experiences of gender marginalization?

### Materials and Methods

The sample for this study includes 338 undergraduate students enrolled in the Spring, Summer, and Fall 2017 semesters at the University of Utah. The University of Utah is a Predominantly White Institution (PWI), with about 68% of enrolled students identifying as White (University of Utah, 2017). We targeted instructors in social science disciplines to send out our survey invitation to their undergraduate classes. This convenience sample approach does not result in a representative sample (Gliner et al., 2017) but is commonly used in quantitative studies where random samples or population samples are not feasible or cost-prohibitive (Etikan et al., 2016). Students

received a link to an online Qualtrics survey sent out by their instructor through their student portal platform. Surveys were anonymous, and students were under no obligation to complete the survey. Participants could volunteer their email addresses to enter a raffle to win a gift certificate upon completing the survey. We cannot calculate a response rate because we could not verify instructors' follow-through with sending out survey links. The University of Utah Institutional Review Board approved all study procedures and materials.

### Measures

Below we describe the areas we measured within our survey. We asked students about their experiences on campus based on their gender identity and expression. We also used traditional measures of sex and gender and then used the gender image scales we developed for this study.

**Gender Marginalization.** The outcome of interest for this study is gender marginalization. Our goal was to create a detailed assessment of students' experiences on campus, specifically as they relate to their gender identity. We asked them about eight different aspects of gendered experiences on campus (see Table 1). Response options for each item ranged from strongly disagree (1) to strongly agree (6). In addition to examining individual measures of gender discomfort, we further created an index of gender marginalization based on the sum of all the individual items included in Table 1 divided by the sum of the elements. As measured by Cronbach's alpha, scale reliability was high (alpha = 0.89). Supplementary exploratory factor analyses also suggest that all eight components of the scale load on one factor (Eigenvalue = 4.60). We retained 334 participants with complete information across all gender marginalization measures for our analytic sample. Sample sizes differ for other covariates due to missingness.

**Established Measures of Sex and Gender.** We also asked respondents about sex assigned at birth and current gender following Magliozzi et al.'s (2016)

— **Table 1** —

*Gendered Experiences on Campus (n = 334)*

| | Mean | SD | Min | Max |
|---|---|---|---|---|
| | | | 1=strongly agree | 6=strongly disagree |
| (1) I feel comfortable expressing my gender identity on campus. | 1.4 | 0.8 | 1 | 6 |
| (2) There are spaces on campus where I am misgendered. (reverse coded) | 1.7 | 1.23 | 1 | 6 |
| (3) My gender is validated on this campus. | 1.56 | 0.98 | 1 | 6 |
| (4) I feel comfortable using the restroom that aligns with my gender identity. | 1.28 | 0.64 | 1 | 5 |
| (5) My professors value and respect my gender identity. | 1.38 | 0.66 | 1 | 4 |
| (6) I feel comfortable sharing my gender pronouns with my professors. | 1.38 | 0.77 | 1 | 5 |
| (7) My professors consistently use my correct gender pronouns when referring to me. | 1.25 | 0.55 | 1 | 4 |
| (8) When I interact with staff (i.e. academic advisors, admissions counselors, registrar's staff) they use the correct gender pronouns when referring to me. | 1.29 | 0.69 | 1 | 6 |
| Gender Marginalization Index Total (alpha=0.89) | 1.41 | 0.62 | 1 | 4.38 |

*Note*: Higher values indicate higher levels of gender marginalization. We excluded four participants with incomplete data on one or more measures of gender marginalization.

approach (See Table 2). Response options for sex assigned at birth were male, female, and intersex. Our sample did not contain respondents' assigned intersex at birth. Gender identity was measured by the question, "What is your current gender?" Respondents could select one or more options: Woman, Man, Transgender, Gender queer, Gender nonconforming, and/or A gender not listed here (please specify). Combining the information from the question about gender identity and sex assigned at birth, we created a measure of cisgender status. In supplemental analyses, we included a three-category measure ("cisgender woman," "cisgender man," and "beyond binary") in the multivariate models and achieved similar results.

— **Table 2** —
*"Traditional" Measures of Sex, Gender, and Sexuality*
*(n = 334)*

|                    | Mean | Min. | Max. |
| ------------------ | ---- | ---- | ---- |
| Sex at Birth       |      |      |      |
|   Male   | 0.24 | 0    | 1    |
|   Female | 0.76 | 0    | 1    |
| Gender             |      |      |      |
|   Cisgender Woman | 0.72 | 0 | 1 |
|   Cisgender Man   | 0.22 | 0 | 1 |
|   Beyond Binary   | 0.05 | 0 | 1 |
| Sexuality          |      |      |      |
|   Straight | 0.69 | 0  | 1    |

**Gender Image.** Throughout higher education, data sets collected through survey methodology, which focus on the student experience, rely on categorical, often binary, measures of identities, specifically gender and gender identity (Garvey, 2014). These measures typically ask survey participants their gender as either male or female, which ultimately conflates sex and gender. Garvey et al. (2019) as well as others (see, e.g., Garvey & Rankin, 2015; Renn, 2010) call for quantitative researchers to consider the complexity of gender and sexuality in survey data from a meth-

odological and theoretical standpoint. Recent scaled measures of gender identity and expression are used as a strategy to provide an improved way to measure gender in surveys. GenIUSS (2014) suggested a two-step approach to measuring gender: first, measure sex assigned at birth with the options male and female, and second measure gender identity with the categories male, female, transgender, and other. Magliozzi et al. (2016) took the two-step approach put forth by the GenIUSS and added a third step to their strategy for gender measurement. First, they added the category "Intersex" to the sex assigned at birth measure (Magliozzi et al., 2016). For the third step in their gender measurement questions, Magliozzi et al. (2016) added scales to measure the femininity and masculinity of survey participants. On these scales, respondents rate their levels of femininity and masculinity in terms of how they view themselves, and then, respondents rate their femininity and masculinity in terms of how they felt others view them.

Our approach to gender measurement for this project builds on the work of Magliozzi et al. (2016) to include scaled measures for how students see themselves and how they think others view them. The main change we made to the scales presented by Magliozzi et al. (2016) was to continue to disrupt the binary created by only measuring femininity and masculinity. In reflecting on Jourian's (2015) work on developing a more dynamic model of gender and sexuality and his call that there are many different ways to describe someone's gender identity and expression, we added a third measure to the scaled approach and included androgyny as one of our scaled gender expressions. Our scales measure how an individual sees themselves and how others see them in levels of femininity, masculinity, and androgyny. Specifically, we asked participants, "In general, how do you see yourself?" and "In general, how do most people see you?" Respondents could select from a 7-point scale from "*Not at all*" to "*Very*" on all three dimensions for both how they see themselves and how others see them (See Figure 1). We coin the responses on the six interrelated scales

**— Figure 1 —**

*Survey Measures of Gender Identity and Expression*

In general, how do you see yourself? (Please answer all three scales)

|           | Not at all | 1 | 2 | 3 | 4 | 5 | Very |
|-----------|:----------:|:-:|:-:|:-:|:-:|:-:|:----:|
| Feminine  | O | O | O | O | O | O | O |
| Masculine | O | O | O | O | O | O | O |
| Androgynous | O | O | O | O | O | O | O |

In general, how do most people see you? (Please answer all three scales.)

|           | Not at all | 1 | 2 | 3 | 4 | 5 | Very |
|-----------|:----------:|:-:|:-:|:-:|:-:|:-:|:----:|
| Feminine  | O | O | O | O | O | O | O |
| Masculine | O | O | O | O | O | O | O |
| Androgynous | O | O | O | O | O | O | O |

**— Table 3 —**

*Gender Image*

|  | N | Mean | SD | Min. | Max. | % Missing |
|---|---|---|---|---|---|---|
| Masculinity (self) | 292 | 2.36 | 1.77 | 0 | 6 | 12.6 |
| Femininity (self) | 328 | 3.91 | 1.72 | 0 | 6 | 1.8 |
| Androgyny (self) | 272 | 1.41 | 1.76 | 0 | 6 | 13.8 |
| Masculinity (How do others see you?) | 288 | 2.08 | 1.98 | 0 | 6 | 13.8 |
| Femininity (How do others see you?) | 327 | 4.01 | 1.87 | 0 | 6 | 2.1 |
| Androgyny (How do others see you?) | 266 | 0.98 | 1.44 | 0 | 6 | 20.0 |

*Note*: 0 represents "Not at all;" 6 represents "Very."

"gender image;" see Table 3 as they reflect a hybrid between gender expression and gender identity.

There was a non-trivial amount of missing data on these measures (see Table 3). The rate of missing values among the androgyny measures (18.6% and 20%) suggests that participants might have struggled to understand the concept and see themselves in those terms. Higher levels of missingness in masculinity-related measures versus femininity-related ones reflect the sample composition: cisgender women (about 75% of our sample) were more likely to not respond to questions about how masculine they see themselves/others see them, and cisgender men were less likely to provide an assessment of their femininity (see Table 3).

**Analytic Strategy**

Our analysis proceeded in three steps. In the first step, we described gender marginalization experiences in the sample. We then compared means across sub-

groups, using a 95% confidence interval. We then estimated pairwise correlations, using .05 as the significance threshold. In the third step, we used multivariate ordinary least squares regression analyses with listwise deletion of missing values in the covariates. We estimated models that included the three components for gender (separate for self-image and as "seen by others") alone or in conjunction with a control for gender category as well as models that included gender-image.

**Limitations**

Our analysis proceeded in three steps. In the first step, we described gender marginalization experiences in the sample. We then compared means across subgroups, using a 95% confidence interval. We then estimated pairwise correlations, using .05 as the significance threshold. In the third step, we used multivariate ordinary least squares regression analyses with listwise deletion of missing values in the covariates. We estimated models that included the

— Table 4 —

*Gender Marginalization Across Categories, Mean Comparisons Across Subgroups*

|  | Sex assigned at birth: Male-Female | Gender: Man, Woman, beyond binary | Simplified Gender Identity: Cisgender vs. not cisgender |
|---|---|---|---|
| Higher values indicate MORE DISCOMFORT |  |  |  |
| (1) I feel comfortable expressing my gender identity on campus. | n.d. | M,W<beyond Binary (BB) | Cisgender (cis)<not cisgender (ncis) |
| (2) There are spaces on campus where I am misgendered. (reverse coded) | n.d. | M,W<BB | cis<ncis |
| (3) My gender is validated on this campus. | n.d. | M,W<BB | cis<ncis |
| (4) I feel comfortable using the restroom that aligns with my gender identity. | n.d. | M,W<BB | cis<ncis |
| (5) My professors value and respect my gender identity. | n.d. | M,W<BB | cis<ncis |
| (6) I feel comfortable sharing my gender pronouns with my professors. | n.d. | M,W<BB | cis<ncis |
| (7) My professors consistently use my correct gender pronouns when referring to me. | n.d. | M,W<BB | cis<ncis |
| (8) When I interact with staff (i.e. academic advisors, admissions counselors, registrar's staff) they use the correct gender pronouns when referring to me. | n.d. | M,W<BB | cis<ncis |
| Gender Marginalization Index Total (alpha= 0.89) | n.d. | M,W<BB | cis<ncis |

*Note*: Basted on 95% confidence intervals, n.d indicates that 95% confidence intervals surrounding the sample mean overlap between groups.

three components for gender (separate for self-image and as "seen by others") alone or in conjunction with a control for gender category as well as models that included gender-image.

## Results

When we compared gender marginalization across subgroups, we found that gender marginalization did not differ significantly between individuals assigned male and female at birth; however, we did find that current gender matters (see Table 4). Although we did not find differences in gender marginalization between respondents who identified as women or men, individuals who identified beyond the binary (i.e., transgender, nonbinary, gender queer, or a combina-

tion of multiple identities) had significantly higher levels of gender marginalization across the board, for each of the indicators and the composite score.

When we compared cisgender respondents to non-cisgender participants (derived from sex at birth and current gender), the only clear difference we found is in the discomfort related to restroom use. Cisgender respondents felt significantly more comfortable using the restroom that aligns with their gender identity compared to individuals who were not cisgender.

In our second step, we estimated pairwise correlations (see Tables 5a and 5b). We find that higher levels of self-assessed femininity are associated with lower levels of gender marginalization, but that did not hold

### — Table 5a —
*Significant Pairwise Correlations between Gender Marginalization and Gender Image*

| | Femininity (self) | Masculinity (self) | Andryogyny (self) |
|---|:---:|:---:|:---:|
| (1) I feel comfortable expressing my gender identity on campus. | - | + | + |
| (2) There are spaces on campus where I am misgendered. (reverse coded) | - | + | + |
| (3) My gender is validated on this campus. | - | | + |
| (4) I feel comfortable using the restroom that aligns with my gender identity. | - | | + |
| (5) My professors value and respect my gender identity. | - | | + |
| (6) I feel comfortable sharing my gender pronouns with my professors. | - | | + |
| (7) My professors consistently use my correct gender pronouns when referring to me. | - | | + |
| (8) When I interact with staff (i.e. academic advisors, admissions counselors, registrar's staff) they use the correct gender pronouns when referring to me. | - | | + |
| (9) Gender Marginalization Index Total (alpha= 0.89) | - | | + |

*Note*: Higher values indicate MORE Gender DISCOMFORT

**— Table 5b —**

*Significant Pairwise Correlations between Gender Marginalization and Gender Image*

| | Femininity (others) | Masculinity (others) | Andryogyny (others) |
|---|---|---|---|
| (1) I feel comfortable expressing my gender identity on campus. | | | + |
| (2) There are spaces on campus where I am misgendered. (reverse coded) | | | + |
| (3) My gender is validated on this campus. | | + | + |
| (4) I feel comfortable using the restroom that aligns with my gender identity. | | | + |
| (5) My professors value and respect my gender identity. | | | + |
| (6) I feel comfortable sharing my gender pronouns with my professors. | | | + |
| (7) My professors consistently use my correct gender pronouns when referring to me. | | | + |
| (8) When I interact with staff (i.e. academic advisors, admissions counselors, registrar's staff) they use the correct gender pronouns when referring to me. | | | + |
| (9) Gender Marginalization Index Total (alpha= 0.89) | | | + |

for how feminine others see an individual. We found that both scales (i.e., self-assessed and others) indicated higher levels of androgyny are associated with gender marginalization across campus. Results for masculinity are mixed, with self-assessed masculinity associated with greater marginalization with respect to comfort expressing gender identity on campus and in spaces on campus where they are misgendered (see Table 5a). Higher levels of masculinity through the lens of others is associated with greater concerns about having one's gender validated on campus (see Table 5b).

In the final step, we estimate multivariate regressions. Table 6 summarizes the models. Model 1 uses only cisgender status. Model 2 includes levels of femininity, masculinity, and androgyny as seen by others, and Model 3 includes self-described levels of femininity, masculinity, and femininity. Models 4 and 5

control for cisgender status along with levels of femininity, masculinity, and androgyny as seen by others and self-described levels of femininity, masculinity, and femininity. We account for cisgender status and heterosexuality and find that higher levels of androgyny, both as seen by others ($b$ = 0.0732, $p$ < 0.01) and self-assessed ($b$ = 0.0927, $p$ < 0.01), are associated with higher levels of gender marginalization. Masculinity, as seen by others, is not associated with gender marginalization once we control for cisgender status and sexuality (See Model 4 in Table 6). Self-described masculinity is associated with more comfort in using restrooms aligned with gender identity, and greater comfort sharing gender pronouns with professors as well as more correct usage of pronouns by professors and staff.

We find that higher levels of self-described femininity ($b$ = 0.0677, $p$ < 0.05) (See Table 6) is associated

**— Table 6 —**

*Multivariate Regression Models of Gender Marginalization Based on Gender Identity and Expression*

|  | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
|---|---|---|---|---|---|
| Masculinity (other) |  | 0.0716** |  | 0.0404 |  |
|  |  | (1.995) |  | (1.373) |  |
| Femininity (other) |  | 0.0543 |  | 0.0382 |  |
|  |  | (1.489) |  | (1.283) |  |
| Androgyny (other) |  | 0.166*** |  | 0.0732*** |  |
|  |  | (6.314) |  | (3.196) |  |
| Cisgender | -1.664*** |  |  | -1.502*** | -1.356*** |
|  | (-14.03) |  |  | (-11.52) | (-10.27) |
| Masculinity (self) |  |  | -0.0313 |  | -0.00135 |
|  |  |  | (-0.939) |  | (-0.0474) |
| Femininity (self) |  |  | -0.0677** |  | -0.0161 |
|  |  |  | (-2.030) |  | (-0.560) |
| Androgyny (self) |  |  | 0.170*** |  | 0.0927*** |
|  |  |  | (8.497) |  | (5.010) |
| Constant | 2.979*** | 0.920*** | 1.510*** | 2.534*** | 2.623*** |
|  | (25.83) | (4.385) | (7.560) | (11.46) | (13.04) |
| Observations | 334 | 266 | 271 | 266 | 271 |
| R-squared | 0.372 | 0.145 | 0.252 | 0.433 | 0.464 |

*Note*: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$; Standard Errors in Parentheses

with more spaces where individuals are misgendered as well as higher values on the overall gender marginalization index. In contrast, femininity through the lens of others is not associated with gender marginalization or discomfort.

## Discussion: Possibilities and Ponderings

Our study, at least within the sample described above, demonstrates that gender marginalization on college campuses can extend to students who identify as cisgender but whose gender expressions are interpreted as nonnormative by others. We also demonstrate that, as expected, trans*, nonbinary, and other students who are not cisgender express substantially higher levels of gender marginalization. Not unexpectedly, heterosexuality and normative gender expressions seem to shield students from interrogations of their own gender expression. Our study further illustrates that gender image or other complex measures of gender that go beyond categorical measures of gender identity can help to better understand students' lived experiences. This is in line with prior research that has argued that traditional measures of gender and sex are insufficient in understanding inequality processes (Geist et al., 2017).

All genders within our sample appear to have varying levels of femininity, masculinity, and androgyny. Although our sample size is small, and broad

generalizations cannot be made from this one sample, the utilization of gender scales and a more nuanced understanding of gender has some significant implications for higher education. Marginalization based on gender is more complex than comparing cisgender student experiences against trans* student experiences. As seen in our data, students who do not necessarily identify as trans* or nonbinary also experience microaggressions either through interactions with staff or faculty or in gendered spaces like bathrooms. Students may identify as cisgender but based on how others may view their gender; they may still experience some levels of gendered violence more commonly experienced by trans* and nonbinary students. In other words, cisgender students who do not adhere to gender norms in their outward appearance also experience the gender policing and microaggressions experienced by trans* and nonbinary students. The discrimination students experience based on their gender also goes far beyond the bathroom. Marginalization experiences occur in classrooms, student affairs offices, and other corners of campus. Thus, when campus administrators, policymakers, or record holders create policies and practices to improve gender discrimination on campus, they need to understand that there is not just one spot on campus or one small group of students affected by this issue. Genderism and gender-based discrimination occur across campus and experienced by both trans* and cisgender students. As described by Stewart and Nicolazzo (2018), focusing on those most marginalized on the college campus works to improve the lives of *all* students on campus.

In turning to campus climate studies, such as the Rankin et al.'s (2010) national study on campus climate for LGBT students, studies such as these could be made better by expanding the ways gender identity and expression are measured. Comparing the experiences of trans* students with cisgender students oversimplifies gender and does not capture the experiences of students who may not identify as trans* or beyond the gender binary but do experience some microaggressions based on how their gender is perceived

at the time. Also, a more complicated measurement of gender, alongside an expansive measurement of racial identity, would likely provide a better approach to measure the racialized and gendered experiences of students on campus as normative notions of masculinity and femininity are anchored in whiteness (Stewart & Nicolazzo, 2018).

Campus policies, as well as budgets, are often tied to the numbers of students in certain areas of campus. Thus, a more nuanced understanding of gender identity and expression among the student population may allow policies to facilitate more gender-neutral spaces and prompt rethinking into how spaces on campus are gendered and ways to make the campus more inclusive of students' gender diversity. Providing gender-neutral bathrooms (Beemyn, 2005), mixed-gender housing options (Nicolazzo & Marine, 2015), and even the discussion of National Collegiate Athletic Association (NCAA) policies that allow trans* students to compete on collegiate sports teams (Griffin & Carroll, 2011) are areas of campus that could directly benefit from a more nuanced understanding of students' gender identities and expressions.

Areas on campus that collect and maintain student data are critical sites to rethink the ways in which gender counts and is enforced on campus. As Marine (2017) argues, any space on campus segregated by sex can be exclusionary to students; thus, scaled measures of gender could help illustrate just how limiting binary categories of sex can be to students on campus. Through expanded survey measures of gender identity and expression, as illustrated in this study, areas of enrollment management can provide more agency to students in describing their gender in campus data systems. Providing students with opportunities to change the name and/or pronouns they want to use on campus and figuring out ways to allow campus information systems to indicate the correct name and pronouns on student pages and course rosters for both administrative staff and faculty can help to reduce the administrative violence cause by constantly

misgendering and/or misnaming students. Specifically, training could help staff understand why seemingly simple things, like using a student's correct name or pronoun, can go a long way towards helping not only trans* students but all students feel seen on campus.

### Future Research and Survey Instrument

One area of the survey instrument and data collection process that needs some consideration is the use of femininity, masculinity, and androgyny as the constructs measured to make up gender identity and expression. In the survey, we did not include definitions for femininity, masculinity, or androgyny. On the one hand, not providing definitions allowed each individual to interpret each construct for themselves. On the other hand, definitions would have allowed survey participants to know how the researchers were interpreting each construct. Additionally, when it comes to androgyny specifically, we do not have a good grasp on how people conceptualize and interpret androgyny since it is less commonly used than femininity and masculinity. Furthermore, more research is needed to determine if these terms are the most useful in articulating gender identity and expression. Gender varies by context and culture and is deeply connected to race and ethnicity. As researchers on this project, we are both white, queer scholars, so our understanding of gender is very much rooted in euro-centric norms and articulations of gender. And such, further research needs to interrogate the very terms used to describe gender across race and ethnicity to determine if other terms or different definitions of those terms could help guide the measurement of gender through these scales.

### Conclusion

Measures of gender and sexuality, specifically measures that expand upon or disrupt binary and categorical measures of gender and sexuality, are needed within higher education, particularly student affairs. In data collection efforts of students and their lived experiences on campus, gender image measures can provide a more fine-grained understanding of who is included and who is marginalized on campus. Studies that expand how the measurement of gender can serve as the basis for improving outreach efforts, staff training, and policy implementation. We aimed to illustrate how scaled measurements of gender identity are developed and used for survey methodology and quantitative methods. Our study provides a glimpse into what the utilization of scaled measures of identity offer, with respect to gender, beyond the use of typical identity markers or categories. Ultimately, our intent is that an approach like the one we offer in this study creates a more inclusive educational environment for many if not all students. Our results also suggest that faculty and staff still can do more to center gender diversity and help students who may be or appear gender nonconforming feel welcome and included on campus. Allowing gender diverse students to self-identify is an important step towards a more inclusive campus. Gender is an integral part of all students' experiences on campus. We do not seek to equate the systemic exclusion experienced by trans* and nonbinary students to perhaps isolated feelings of discomfort experienced by cisgender students. However, we seek to complicate the measurement of gender to provide nuance to understanding campus climate based on gender identity. Our findings suggest that gender matters for students' experiences on campus. Specifically, our findings suggest that gender expression is limited for all, and even small efforts that allow students to express their genders freely will improve the campus climate for all students.

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