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**Moving Past the Binary:
Transgender and Gender Non-Conforming Students' Experiences of and Perspectives on
College Campus Fitness Centers**

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Introduction

Within the existing literature regarding trans-inclusion on college campuses, a consistent theme arises: trans and gender nonconforming (TGNC) students see a lot of room for improvement. In a 2015 study by Patchett and Foster published in the *Recreational Sports Journal* that examined the environment for transgender participants in campus recreation, they found that the majority of institutions studied did not have policies specific to transgender participants (n=123); only 63% had gender-inclusive bathrooms; and, while 57% of those schools had staff training related to diversity, only 13% (n=8) had specifically transgender-related training. However, there was also an optimistic attitude amongst participants: 79% of respondents disagreed that their institutions had resisted implementing transgender policies. Based on these findings, it is clear that there is a need for transgender-specific inclusion within the diversity-promotion on college campuses. Even if there is not resistance, more targeted action is needed.

While research regarding the experiences of transgender and gender nonconforming college students is sparse, this is especially true for the context of campus gyms/fitness centers (the two will be used interchangeably here). Gyms and fitness centers are in particular need of reform because they are a space that could be used to promote health and wellbeing, but they are often avoided and perpetuate harmful gender norms.

The current study draws from the structures and findings of two key previous studies. The first is a study by Goldberg, Beemyn, and Smith entitled “What is Needed, What is Valued: Trans Students’ Perspectives on Trans-Inclusive Policies and Practices in Higher Education.” It was published in the *Journal of Educational and Psychological Consultation* in 2019. This study examined the experiences of TGNC students in all areas of campus life. Its aim was to examine

the institutional factors associated with trans-inclusive policies and supports; which trans-inclusive policies and supports are viewed as important by different groups of TGNC students; and how the presence of those factors is related to TGNC students' senses of belonging on campus and their perceptions of campus climate. They used closed-ended and open-ended questions to measure these variables, in the form of an online survey. Their sample size was 507 TGNC students. The findings of this study support the idea that TGNC students "suffer at the hands of genderism" (Goldberg, et al., 2019, p. 61), which is the perpetuation and enforcement of the gender binary.

The study by Goldberg, et al. (2019) included gender neutral/inclusive bathrooms in campus buildings as a trans-inclusive support, and participants generally rated them as important, although only 44.9% reported that they knew their college campus had them. In addition, private changing facilities and single-person showers in athletic facilities and recreational centers were also generally rated as important, although only 16.7% said that their campus fitness centers had them, and the majority of respondents (52.6%) did not know whether they were present. These were the two specific trans-inclusive supports included in this study, although (as mentioned in the results section here) there are other supports that indirectly impact TGNC students' behavior and experiences at campus fitness centers.

The second study is included in the master's thesis of Arian Quinones Story, which was completed in 2017, entitled "Understanding Perceived Barriers and Current Practices for Transgender Needs within the Fitness Industry." This study only looked at how inclusive fitness centers/gyms in non-academic settings were. However, it still provides ideas for which other specific factors can impact TGNC students' experiences, beyond just the bathrooms and changing facilities. The findings of this study show that TGNC people experience lack of

inclusion in non-academic fitness facilities, particularly via fear of acceptance, lack of trans-specific policies, and harassment. Campus fitness centers are clearly in a different context. However, they are still connected with the fitness industry as a whole. When also considering the findings of Goldberg, et al. (2019) regarding college campuses as a whole, similar patterns may be found at campus fitness centers.

The purpose of the current study is to provide evidence regarding the experiences of TGNC college students at campus fitness centers and how these fitness centers can be improved to benefit TGNC students. Specifically, it aims to address the following: to understand the presence of inclusive facilities; the perceived importance of these facility variables; the use of campus fitness facilities; what improvements TGNC individuals would like to see; and how any of these factors correlate with gender identity, race, disability status, level of “outness” regarding gender identity, and the types of institutions students attend. Findings in a study such as this may inform colleges and universities on how they can make their fitness centers more inclusive to TGNC individuals and who they should make sure to cater to based on who has otherwise been most excluded.

Literature Review

Transgender and gender nonconforming (TGNC) individuals face mental and physical health risks and disparities. To begin, the LGBTQ+ population as a whole faces stress as a result of discrimination. In the introduction to their master’s thesis (2017), Story links this stress with health issues, going on to cite studies regarding suicide, mental health, smoking, obesity, and drug and alcohol use. Indeed, the Virginia Transgender Health Initiative Study (VTHIS) conducted between 2005 and 2006 (published in the *American Journal of Public Health* in 2013) was in response to the body of research suggesting that social factors such as experiencing

violence and discrimination “may result in broad negative psychological and physiological changes with important implications for health across populations” (Bradford, Honnold, & Xavier, 2013, p. 2). To back up this claim regarding the relationship between discrimination and health, the creators of the VTHIS cited 12 studies on the various physical and mental health effects that discrimination may cause. These studies weren’t just on gender identity. Some looked at discrimination and the resulting stress based on sexual orientation, race, and socioeconomic status, showing that the stress experienced by various marginalized groups can all have detrimental effects on health, and suggesting that the stress of discrimination alone can make the difference (Clements-Nolle, Marx, & Katz, 2006; Clark, Anderson, Clark, & William, 1999; Burgess, Tran, Lee, & van Ryn, 2007; Díaz, Ayala, Bein, Jenne, & Marin, 2001; Kessler, Mickelson, & Williams, 1999; Krieger & Sidney, 1996; Krieger & Sidney, 1997; Mays & Cochran, 2001; Meyers, 2003; Turner & Lloy, 1999; Turner & Lloy, 2004; Turner & Avison, 2003, as cited in Bradford, et al., 2013).

In the Transgender Health Initiative Study itself, Bradford, et al. (2013) surveyed 387 self-identified transgender people across Virginia between 2005 and 2006. The survey examined variables related to discrimination in healthcare, employment, and housing. Three hundred and fifty of the respondents provided enough eligibility information for their data to be analyzed. Amongst those survey responses analyzed, 41% of respondents reported having been discriminated against due to being transgender, and healthcare was the most common area in which discrimination was reported. They go on to explain that “multilevel interventions, including policy-level legal protections and training for health care providers, would be helpful to address the discrimination faced by this population” (Bradford, et al., 2013, p. 8). In addition, they also found that 64% of respondents had used tobacco at some point, with 23% saying they

had a lifetime problem and 13% currently smoking nicotine. To add to that, 23% reported a past or current problem with alcohol, and 6% reported a history of injection drug use (Bradford, et al., 2013).

These findings were echoed in a 2010 study by the National Center for Transgender Equality and National Gay and Lesbian Task Force. This study included 6,450 valid responses to a 70-question survey with questions on housing, employment, health and healthcare, and education. They found that 19% of respondents had been refused health care, 28% reported having experienced harassment and violence in a medical setting, and 50% reported that at some point health care providers had not known how to care for transgender people properly (Grant, Mottet, Tanis, Herman, Harrison, & Keisling, 2010, as cited in Story, 2017). Story (2017) explains that these healthcare barriers were “closely linked to drug and alcohol abuse” (p. 11), which was found in more than 25% of respondents, and they were also linked to attempted suicide, which was reported by 41% of respondents. Particularly when it comes to drug and alcohol abuse, it is clear that health care access, mental health, and physical health are intimately intertwined.

The 2020 Trevor Project National Survey on LBGQT Youth Mental Health provides up-to-date data regarding the mental health of LBGQT+ people between the ages of 13 and 24. Using a cross-sectional quantitative study design, the Trevor Project collected data from a survey that included up to 150 questions on sexual orientation, gender identity, and mental health status. The final sample of valid responses included 40,001 LBGQT+ youth. Key findings specific to the TGNC population included that more than half of transgender and non-binary respondents had seriously considered suicide; more than 75% of transgender and non-binary respondents reported having symptoms of generalized anxiety disorder; and over 60% of transgender and

non-binary respondents had self harmed in some regard in the last year. However, it was clear that gender affirmation was beneficial for mental health, with those who reported that all or most people around them respected their pronouns attempting suicide at half the rate of those who did not report that their pronouns were usually respected (Trevor Project, 2020). While 2020 was an unusual year due to the COVID-19 pandemic and this may have exacerbated mental health issues, it is still undeniable that LGBTQ+ and particularly TGNC—youth face major mental health challenges

All of these health risk factors may be compounded by other marginalized identities, such as race and sexual orientation. Keep in mind that, while sexual/romantic orientation and gender identity are not the same thing, they often overlap. If someone has transitioned from one binary gender to another, their sexual/romantic orientation may have been something other than heterosexual either before or after transitioning. Additionally, someone with a non-binary gender identity challenges the binary gender terms and ideas that are often used to define sexual/romantic orientation. Therefore, many people of a gender minority have likely experienced discrimination based on gender identity as well as sexual/romantic orientation at some point in their lives.

In addition to facing mental and physical health issues that anyone could encounter, there are also health concerns specific to TGNC people undergoing hormone therapy. Hormone therapy poses an added health risk for those who use it, as Story (2017) explains. They cite a summary by the World Professional Association for Transgender Health Standards of Care that includes studies by Feldman & Safer (2009), Hembree et al. (2009), and Asscheman et al., (2011), explaining that feminizing hormones may increase the risk of venous thromboembolic disease, cardiovascular disease, type II diabetes, as well as potentially increasing triglycerides

and blood pressure. Moreover, masculinizing hormones may lead to weight gain, and decreased HDL levels (Coleman, et al., 2011, as cited in Story, 2017). Story goes on to assert that these increased risk levels make it even more important for those who are undergoing hormone therapy to exercise. This, in turn, makes it particularly important that professionals in the fitness setting provide a welcoming environment for TGNC individuals.

The mental and physical health disparities that TGNC individuals face must be addressed by healthcare professionals of all kinds. While fitness facilities are just one part of a much larger picture, they offer an opportunity to address these disparities through exercise and community building. On the physical front, exercise can help people of all kinds when not taken to extremes. The benefits include reducing several of the risks associated with hormone therapy. A meta-analysis by Lin et al. in 2015 explains that, as is well recognized, exercise can reduce the risk of cardiovascular disease and benefit cardiovascular fitness, along with decreasing triglycerides and increasing HDL (Lin, et al., 2015, as cited in Story, 2017).

On the mental health front too, exercise offers numerous benefits. It is well established that exercise has the potential to boost mental health overall, especially when it comes to lowering depression symptoms. This is illustrated by Stathopolou, et al. (2006), who found that exercise benefits those with depression and substance abuse disorders (as cited in Story, 2017). Additionally, a study by Fontaine in 2000 found that exercise may help to control stress and increase feelings of confidence and belonging via social interactions (as cited in Story, 2017). Some of these benefits may not come just from the act of exercising but also from the structure and positive social experiences that exercise brings.

It is clear that fitness facilities have the potential to benefit the health of individuals of any sexual orientation or gender identity. Considering the very concerning statistics on youth

TGNC people's mental health, this is an opportunity that should not be taken lightly. However, they need to provide a positive environment in order to do so. As Story very aptly said in the literature review of their master's thesis: "Those in the fitness industry can either choose to exacerbate health issues of the transgender population or improve upon them, by finding ways to promote an inclusive environment, therefore potentially helping to increase physical activity in these populations" (Story, 2017, p. 12).

There is still a lot of room for growth in the fitness industry as a whole, as Story explains, as gyms often uphold the same cisheteronormative standards that hurt TGNC individuals. Story (2017) used an online survey to ask self-identifying transgender people who either 1) currently had a membership to or frequently attended gym(s) outside of an academic setting, 2) had done so in the past, or 3) were interested in joining a non-academic gym. She asked them questions regarding demographics, transitioning and "passing" status, perceived barriers to exercising in a non-academic gym setting, inclusiveness in such a setting, and their experiences attending gyms. 168 individuals completed the survey. Amongst those who had experience going to a non-academic gym (n=137), 23% said they had trouble signing up due to gender identity; 30% said they had been refused training or similar services, with northeasterners experiencing the highest rate of this; 64% said they had either quit attending the facility or had contemplated quitting while transitioning; and 70% of those who were transitioning while using the gym said they felt excluded at some point. Indeed, 64% of respondents, regardless of whether they were transitioning or not, reported having felt unwelcome due to their gender identity. While 54% of respondents said that there were gender-neutral bathrooms at their gyms, only 37% said that there were gender-neutral locker rooms. Additionally, only 17% reported knowing of non-discrimination policies at their gym that addressed transgender people.

When it comes to how gyms and the fitness industry as a whole operate, not enough attention is paid to those who do not fit the gender binary. In addition to surveying transgender individuals, Story also surveyed fitness professionals. While 91% of respondents said that understanding transgender health issues was very important or extremely important, the majority reported being either not knowledgeable or only slightly knowledgeable on them. Systematic factors in place don't help. Only 27% of gym users said there were forms at the gym that differentiated between sex at birth and gender. Story points out that formatting forms to include both sex assigned at birth and gender enables fitness professionals to provide the best and most appropriate service possible by giving them the opportunity up-front to address clients as they wish to be addressed and to provide the most appropriate and accurate health information. However, Story found that there is confusion as to what standards and protocols are most appropriate to follow for transgender individuals. This makes sense, as many health standards are defined by a binary conception of gender and assume that sex assigned at birth is the same as gender identity. Story explains that there is some evidence regarding appropriate protocols for those undergoing hormone replacement therapy (Coleman, et al., 2012, as cited in Story, 2017), but even so, more information and education seems necessary.

Colleges, as a whole, are sometimes more inclusive and accepting than the world at large. As of 2004, about a quarter of those who transitioned their gender would do so during high school and college (Conway, 2004, as cited in Story, 2017). Conway (2004) and Epstein, O'Flynn, & Telford (2003) explain that this is often because colleges seem like a more accepting environment to do so (as cited in Story, 2017). However, Goldberg et al. (2019) explain that college and universities are still "often inhospitable to trans students in that campuses typically reflect and reinforce societal genderism, or the rigid adherence to the gender binary in practices,

policies, and norms” (p. 31), citing a study by Marine & Nicolazzo (2014). This genderism causes pressure to conform to cisnormative ideas of gender (Catalano, 2015, as cited in Goldberg, et al., 2019), which Goldberg explains poses a particular challenge for non-binary individuals, since they do not identify as “either” gender (Goldberg & Kivalanka, 2018, McGuire, Kivalanka, Catalpa, & Toomey, 2016, as cited in Goldberg, et al., 2019).

Goldberg, et al. (2019) surveyed 507 TGNC undergraduate and graduate students, 95.1% of which resided in the United States, and 4.9% of which resided outside of the United States. The online survey included questions on students’ knowledge regarding the presence of trans-inclusive policies and practices on their college campuses; institutional characteristics that are associated with such policies and practices; the perceived importance of each policy/practice; and what students would like to see on their campuses offer regarding TGNC inclusivity. They found that institutions vary in how inclusive they are towards TGNC students, with religiously-affiliated and two-year institutions tending to be less inclusive of TGNC people.

This is consistent with findings from a 2015 analysis of data regarding TGNC students’ experiences at community colleges: Garvey, Taylor, & Rankin analyzed data from Rankin, Blumenfeld, Weber, and Frazer’s (2010) *State of Higher Education for LGBT People* and their findings suggested that “community colleges have campus climates that are not supportive of LGBTQ students; and this is particularly manifested through classroom experiences and faculty interactions” (Garvey, Taylor, & Rankin, 2015, p. 10). (Note that some of the factors contributing to anti-LGBT sentiment in the classroom, such as people saying “that’s so gay” a lot, have likely decreased since 2010.) Findings regarding community colleges are especially important because they tend to have a more diverse population of students. Indeed, in the data from *State of Higher Education for LGBT People*, Garvey, et al. (2015) found that approximately

one-third of respondents were of color and 40% were low-income, which, as we discussed before, are both factors that may exacerbate the discrimination they face and thus their health risks (as explained in Bradford, et al., 2013). Additionally, a large amount of college-attendees in America go to two-year institutions, with approximately 25% of full time undergraduates and 38% of all undergraduates attending them (National Center for Education Statistics, 2017, as cited in Goldberg, et al., 2019).

Goldberg, et al. (2019) also found that the known presence of TGNC-inclusive policies and practices was associated with “a greater sense of belonging and perception of a more affirming campus climate—which have been linked to positive mental health and academic outcomes among sexual minority youth” (Russell & Fisher, 2016, as cited in Goldberg, et al., 2019, p. 59). These policies and practices included some that were directly related to campus fitness centers. To begin, gender-inclusive campus bathrooms were the most-often listed answer to the open-ended question regarding students’ “wish list” for trans-inclusive supports on campus. Inclusive bathrooms were also the factor with the highest importance rating in the quantitative portion of the study. One hundred and fifty-six students mentioned desiring inclusive bathrooms, and of those 156, 13 also mentioned the desire for private changing areas and 11 mentioned private showers, most of which were referring to their presence in campus fitness centers. The comparatively lower mention of private changing areas and showers may be due to a lack of use of campus fitness centers, whereas bathrooms impact all areas of campus.

There were also several other suggestions for improvement made by students that would permeate the fitness center, such as being able to change names on institution paperwork, more gender-inclusive language on forms, non-discrimination policies, and education for students and faculty/staff. Educating faculty/staff on gender minorities especially stood out: 130 students

listed this on their answers to the open-ended “wish list” question, and some said that this was their “number one concern,” suggesting that it be mandatory (Goldberg, et al., 2019, p. 48).

These trainings would presumably include fitness facility staff, and based on the other evidence discussed here, they certainly should.

Goldberg, et al. (2019) also found issues in other aspects of mental and physical health promotion on campus, with several students reporting bad experiences and even being referred out of their campus health and counseling offices because nobody there was capable of treating them. This once again points to the need for all aspects of health care to become more inclusive to TGNC individuals.

The issues of the fitness industry as a whole and the college campus environments in which they sit affect campus fitness centers. This was exemplified by a 2015 study in the *Recreational Sports Journal* by Patchett and Foster. Patchett and Foster sent their survey regarding trans-inclusive policies to hundreds of National Intramural and Recreational Sports Association (NIRSA)-member colleges/universities. A department head or designee was to fill out the survey, so the responses reflect the institution, not the direct experiences of students there. Over 100 institutions responded, with 96% being four-year institutions and 77% being public institutions. When it came to inclusion in campus recreation spaces, there were several areas that could be improved. For gender identification on forms, 72% of institutions used biological sex and 13% allowed for the selection of “other,” which the authors point out is a literal form of “othering” of gender minorities and suggested that a blank line to fill in with alternative answers would be better.

A unique aspect of campus recreation spaces is that they often employ students. Very few (less than one-fifth) of respondents thought that their student employees “could appropriately

handle a complaint about a transgender person in the locker room” (Patchett & Foster, 2015, p. 90), which could be due to a lack of training, as only three respondents had included such a scenario in their training. As Patchett and Foster accurately point out, student employees are “the front-line staff for campus recreation departments” (p. 90), yet only 11% of respondents said they believe they adequately train their student staff in issues related to trans inclusion. This is reflected in only 17% offering the same safe-zone training to student employees as professional staff, with 48% offering such training to staff. That said, the study included a hopeful note, saying, “While only 21% of respondents affirmed the existence of transgender policies, the sample as a whole moderately agreed their mission, vision, and values addressed diversity, and indicated their department has not displayed resistance to implementing such policies” (Patchett & Foster, 2015, p. 90).

Negative experiences can lead to situational avoidance, meaning that TGNC people may modify their behavior to avoid harassment or discrimination. Situational avoidance can be created via personal experience, as well as through knowledge of friends’ and acquaintances’ experiences and the perceived attitude of the society around someone (Couch, et al., 2007, Speer & Green, 2007, as cited in Story, 2017). A 2014 study by Ellis, McNeil, and Bailey resulted in 769 valid survey responses from gender minorities. In the case of these respondents, 38.4% reported avoiding gyms altogether, 38.8% reported avoiding public toilets, and 51.1% said they avoided social situations and places in order to not be harassed. In addition, 67.9% said they felt they had to pass as not-transgender in order to be accepted. A similar trend was found in Story’s aforementioned survey: out of the 31 respondents who reported not using a non-academic gym, 12 (39%) said it was because they were afraid of not being accepted or of being harassed. Additionally, 74% of those who answered questions regarding locker rooms/restrooms reported

avoiding those at the non-academic gyms. Those who had been transitioning a year or less avoided them more often (Story, 2017). These results point to the importance of social factors when it comes to facility usage.

Due to the health risk factors that TGNC people tend to have and the negative experiences that gyms and fitness centers often bring, fitness facilities not only need to be accepting but also visibly inclusive in order to combat situational avoidance. Considering all of the evidence explained here, I will end by echoing what Story said in her master's thesis: "It is the duty of health professionals to provide quality service and information for everyone, and not just the few, or some, or even most" (Story, 2017, p. 3). The current study aims to help make fitness more accessible to all by further understanding the experiences of TGNC students at campus recreation centers and gathering information on potential improvements.

Theoretical Framework

This study is built on various foundational ideas, namely that gender is a social construct; that individuals are impacted by the systems they participate in/are surrounded by; and that these systems are multidimensional and interconnected. In *The Forest and The Trees* (2014), Allan G. Johnson defines the social construction of reality as "the social process of interaction using language and other symbols through which people's perceptions of what is considered to be real are constructed and shared" (p.179). Gender itself is a social construct, along with the other social factors, like race and class. This is not to say that these concepts are not useful or that we do not make them "real" through our use of them and actions based on them. For example, the presence of genital anatomy, hormones, chromosomes, and anything else used to assign gender at birth is real, but the concept that someone with a penis is a man and someone with a vagina is

a woman, and that these gender identities mean that people have to act or look a certain way, is socially constructed.

Johnson (2014) also explains that social life is constantly being influenced by social systems. Bronfenbrenner's (1986) ecological systems model of human development offers a way for these systems to be organized and understood. In this model, social systems are organized into layers. The microsystem accounts for the immediate environment of an individual. In the case of this study, that would be the campus of each college, the local surroundings where each student lives, and the relationships included in those environments, such as with peers, staff, and teachers. The mesosystem accounts for the interactions between the components of the microsystem, such as the culture of the college campus and who the student's peers are. The microsystem is being most directly examined in this study. However, that does not mean that other levels of social systems are not impacting the experiences of TGNC students when it comes to their behavior and experiences at campus fitness centers.

Next, the exosystem includes systems in which the individual does not play an active role but that still impact the individual indirectly. This includes the legal system and mass media. In the case of TGNC individuals, these systems play a large role in determining how they are legally protected, laws surrounding the use of bathrooms, and the ways in which TGNC people are portrayed in mass media, thus impacting how others view them. The exosystem also includes the administration of a college and the ways in which they protect, include, and support TGNC students. Additionally, the macroculture is the larger cultural and social context of a geographic area, group, institution, etc. This includes national culture, local culture, the culture of a school, as well as any subcultures an individual is involved in, such as that of a religious group.

All of these layers are impacted by the chronosystem, which accounts for the time at which something is happening in someone's life. This includes the age of the individual, as well as when in history they are living and the corresponding sociocultural context. This could make those participating in this study have something in common based on being college-aged, but it could also mean that those who are a first-year may have different experiences than those who are in later years of schooling. Additionally, those who are not of typical college age may have a different experience of the same university and circumstances directly because of generational differences.

Due to the interconnectedness of the varying levels of a social ecosystem, one cannot be entirely isolated from another. Therefore, even if a fitness center does everything within its power to promote trans-inclusivity at the facility, that does not exempt the space from being impacted by the campus as a whole or the larger context within which the fitness facility and the college are embedded.

Intersectionality

The inclusion of race and disability status in the current study reflects the theory of intersectionality. Intersectionality is a sociological concept used to explain the ways in which belonging to more than one social group affects one's life in ways that are distinct from just belonging to any one of those groups (Giddens, et al., 2017). The concept was developed by Kimberlé Crenshaw (1989), drawing from critical race theory, and expanded upon by Bowleg, et al. (2003) to include sexual orientation. It has been applied by numerous scholars, particularly with the rise of intersectional feminism. For example, bell hooks has done considerable scholarly work on the intersection of racism and feminism, as was exemplified in her book *Feminism is for Everybody* (2015), just to name one example of her work.

The concept of intersectionality means that someone's experience is not just influenced by their gender identity but by their race, disability status, sexual orientation, romantic orientation, economic status, religious background, etc. Note that, while this study included race and disability status, this is not an exhaustive list of intersecting identity factors that could have been studied. For example, the experience of a white disabled transgender woman is likely different from the experience of a white able-bodied transgender woman. Furthermore, one cannot say that these identity factors are simply layered on top of one another as if they are independent. Instead, they all interact and influence each other, such that the experience itself of being a transgender woman may be different between the two example individuals directly due to their differences in disability status.

Race is an important factor when it comes to health disparities in the United States, in addition to impacting other social experiences, and thus could not be neglected. For example, in a 2020 cross-sectional study in the *American Journal of Preventative Medicine*, health disparities between Black gender minorities and white gender minorities were compared, using data from the optional sexual orientation and gender identity module of the 2014-2018 Behavioral Risk Factor Surveillance System surveys. There were 427 gender minority Black people, 2,724 white gender minority people, and 74,295 cisgender Black people included in the 2014-2018 data. Based on a secondary analysis of the data, compared to white gender minority people, Black gender minority people had statistically significant higher rates of reported cardiovascular disease and diabetes history; generally worse perceived health; and increased financial barriers to care (Lett, Dowshen, & Baker, 2020). There were also various, stark disparities found when Black gender minority people and cisgender Black people were compared, which is to be expected based on studies mentioned in the earlier literature review. These results illustrate the

unique experiences of Black TGNC people compared to white TBNC people and compared to Black cisgender people. Thus, in this example, race and gender identity could not be looked at in an isolated fashion, for that would provide an incomplete picture. They also point to Black TGNC people being especially important to target when it comes to preventative care like exercise.

A Note on Pronouns

The author has and will use “they/them” pronouns for anyone in this paper for whom proper pronouns are not known. This is because gender identity and preferred pronouns do not always relate in a linear or entirely predictable fashion and they/them is being used as the default in lieu of knowing someone’s preferred pronouns.

The Perspective of the Researcher and Emphasis on Trans Voices

The current study is being conducted and interpreted primarily through the lens of the author, who is a self-identified white American cis-woman who, although not committed to a specific sexual/romantic orientation, can be best described as straight, and is conducting this research in the role of an ally rather than someone under the umbrella of LGBTQ+. The presentation and interpretation of this study is not that of a trans or gender non-conforming individual. However, the aim is to center the voices of trans and gender nonconforming students.

Ultimately, data collected in studies such as this can be used in the organizational consultation of colleges and universities. Therefore, the current study is influenced by a model of organizational consultation that pays attention to social justice, which Goldberg, et al. (2019) describes as a model “whereby groups that are marginalized or silenced by the dominant culture are considered front and center in evaluating the need for and ways of achieving systems-level change” (Clare, 2013; Shriberg & Fenning, 2009, as cited in Goldberg, et al., 2019, 29). In this

case, that means that trans students themselves must be included at every stage of the process towards making campuses more inclusive (Shriberg & Fenning, 2009; Beemyn, in press; Clare, 2013; Goldberg & Kivalanka, 2018, as cited in Goldberg, et al., 2019). The design of this study aims to do so by directly survey TGNC students on their experiences at college fitness centers.

Methods

Discussion of Key Terms

See Appendix A for a list of key terms and concepts and their definitions for the purposes of this study. Many of the definitions, when noted, are directly quoted from the introduction and appendix of Goldberg et al.'s 2019 study. As Goldberg et al. also explain, these definitions are not static (Enke, 2012b as cited in Goldberg et al., 2019). I will echo them and say: “We urge readers to recognize these terms—cisgender, trans, binary, nonbinary—as conceptual tools, and encourage awareness of how overreliance on categories and dichotomies is overly simplistic and ignores the fluidity within and across categories” (Goldberg, et al., 2019, 30-31). For example, the appendix lists all of the gender identities that were explicitly listed in the survey of the current study and they are each accompanied by a definition. However, this does not mean that that definition accurately or entirely portrays the exact way in which everyone who checks that box would define the meaning of that identity, although it will likely be at least an approximation of how they would define it for themselves. In making this appendix, I do not take it upon myself to make absolute definitions of these terms but rather, as Goldberg et al. said, simply offer conceptual tools.

Participants

Any undergraduate or graduate students—or those who had graduated in the last year or less—who were 18 years or older and did not identify as exclusively cisgender and/or were

questioning their gender identity were eligible to participate. Ten people submitted the online survey. Three people started the survey but stopped just before the question that asked what their gender assigned at birth was, while two people opened the survey and did not respond to any of the questions past the acknowledgement of informed consent. Only surveys that were submitted were counted as part of the data set, thus n is 10 for the total sample. The bivariate correlation data is presented in Table 9 and the data referred to here is bolded.

Full frequency data regarding demographic information can be found in Table 1. The following gender identities were present in the data set: transgender ($n=2$), non-binary ($n=2$), genderqueer ($n=1$), trans man ($n=4$), gender nonconforming ($n=1$), gender fluid ($n=1$), masculine of center ($n=2$), feminine of center ($n=1$), androgynous ($n=1$), questioning ($n=1$). Three of the participants identified with three gender identities, with two of them identifying with the same three—trans, trans man, and masculine of center—while one participant identified with two gender identities—non-binary and gender fluid. The rest identified with only one gender identity. Trans man was the most frequently reported identity, while no participants identified as a trans woman. Ninety percent of participants had been assigned female at birth, with the remaining one non-binary person was assigned male at birth, and nobody was assigned intersex at birth.

Fifty percent of participants identified as white-only and 50% identified as not being white-only. Amongst those who were not white-only, 60% identified as multi-racial and all of those participants also reported that they are white passing. In the remaining 40%, half ($n=1$) was East Asian only and half ($n=1$) was Black Only. Neither of those participants reported being white-passing. Therefore, of the whole data set, all but 20% of participants were either white or white-passing. The Black and East Asian participants were the only ones to select trans/transgender and masculine of center as their gender identity, in addition to trans man,

which others also selected. Therefore, this accounts for the Pearson Correlation (Table 9) between being white passing and identifying as trans or masculine of center of -1.000 and $p < 0.01$.

Three ($n=3$) participants reported having a disability, while the rest said that they did not. Keep in mind that the question left it up to participants to determine what “disability” meant, whether it was mental or physical, and the nature of the disability cannot be assumed. An interesting correlation is that none of the participants who reported having a disability were white: two were white-passing biracial/multiracial participants and one was a not-white-passing Black participant. This is reflected in the bivariate correlation data (Table 9): the variables of race (white/not white) and disability status have a negative significant correlation ($p < 0.05$), meaning that people who chose “not white” (assigned a value of “2”) were more likely to chose that, yes, they had a disability (assigned a value of “1”). Additionally, all of those who reported having a disability had also been assigned female at birth, although they all had varying gender identities, save for two including “trans man” in their gender identity descriptions.

Eight of the participants resided in the South, which was listed in the survey as the states/districts of TX, OK, AR, LA, MS, AL, GA, FL, TN, KY, WV, VA, NC, SC, DE, MD, or DC. Of the two remaining participants, one resided in the East, which included PA, NY, ME, NH, VT, MA, RI, CT, and, NJ, and one resided in the Midwest, which included ND, SD, NE, KS, MO, IA, MN, WI, IL, IN, MI, and OH. One student was an international student from Canada, and they selected the East as their U.S. place of residence.

Measures

Both closed-ended and open-ended questions were used and these questions were largely based on the survey questions used in the study on trans-inclusivity on college campuses as a

whole by Goldberg et al. (2019) and the masters dissertation of Quinones Story (2017) that sought to understand the experiences and inclusion of trans people in non-academic fitness settings. Some of the questions were taken directly from those studies, while others were modified versions of those used. The modifications were made with the aim of making the questions more inclusive, based on the understanding of the author; to take into account findings of previous studies; to provide more clear and specific data; and to adapt the survey to the specific research questions of the current study, as well as the impact of COVID-19.

Modifications made to promote further inclusivity were the splitting of “Asian Only” into “East Asian Only” and “South Asian” only, to support the visibility of South Asian identities; the addition of “Indigenous” to then read “Native American/Indigenous Only.” Additionally, instead of the section for non-white races reading “of color” as it had in Goldberg, et al. (2019), it read “non-white-only,” to account for the fact that there is debate regarding whether East Asian people are “of color.” A question was added to account for whether non-white participants were white passing, as this could impact the racial experiences of participants.

To aid in making data more specific, Hawaii and Alaska were separated out from the blanket region of the “West,” as they had been listed in Goldberg, et al. (2019) and Quinones Story (2017). This change was made because the geographic locations and cultures of these states are removed from those of mainland Western states, and it was of interest to see whether that would impact the results of other variables.

The question regarding disability was also an addition, due to the findings in Goldberg, et al. (2019): a participant reported that, when there were gender-inclusive bathrooms, they were not disability accessible. Furthermore, disabilities may especially impact the behavior and experiences of someone when it comes to fitness centers/gyms. Note that this question, however,

was ambiguous: some may consider, for example, mental illnesses disabilities, while others would not. In order to limit the length and complexity of the survey, this question was kept simple and aims to only serve as a starting place for investigating the potential differences between the behavior and experiences of TGNC students with and without disabilities.

The open-ended questions were original to the current study, but the use of open-ended questions in addition to closed-ended questions was based on the design of Goldberg, et al.'s study (2019). Finally, questions regarding housing and use of the campus gym were modified to account for the fact that some students may not be living on campus or using the campus fitness center currently solely because they cannot live on their college campus due to the present COVID-19 pandemic.

Procedures

Data was collected using a 39-question online survey developed by the author and published using the Qualtrics software application (see Appendix B). It took between approximately three and a half and twelve minutes for each of the participants to finish the survey. The Bridgewater Institutional Review Board approved the methods used. When required, approval was also obtained from the IRBs of the schools contacted for recruitment. Recruitment was done indirectly, except in the case of the school the author attends. In all but that one case, the author sent emails to the leaders of LGBTQ+- and diversity-related organizations and offices on the campuses of various universities throughout the U.S. These emails included a description of the study and suggestions to inform students of the study via mass email lists, social media posts, and physical flyers. A document that could serve as either a physical flyer or a social media post with information about the study and a QR code to the survey was attached to these emails. In the case of the school the author attends, a social media post on the college's

LGBTQA+ club's Instagram, an email via the same club's contact list, and physical flyers hung in common areas around campus were all distributed by the author herself.

Data Analysis

Data was analyzed using the Statistical Package for the Social Sciences (SPSS) v.27 in order to look for significant bivariate correlation between any of the variables for closed-ended questions. The frequency of all closed-ended responses was also recorded, in addition to the mean and standard deviation for all continuous variables. Responses to open-ended questions were simply reported and interpreted by the author to look for apparent themes.

Results

Institutional Information

All participants reported attending four-year institutions (Table 3). The majority were private (60%) and non-religious (70%), although one participant did not know if their private institution was religiously affiliated. Seventy percent lived in on-campus housing and 30% currently lived in off-campus housing. Participants were asked to report on their most usual/recent living arrangement, since the current pandemic may have caused some to live off-campus when they otherwise would have and usually do live on campus. There were no significant bivariate correlations found regarding the types of institutions students attended and other variables.

“Outness” of Participants

Regarding how open/out each participant was about their gender identity (Table 2), one participant, a white feminine-of-center student who was assigned female at birth, indicated “does not apply” for all of the questions regarding who they are “out” to about their gender identity, although they still answered regarding what contexts and with what frequency they present their

gender as they prefer, and they answered that they always present their gender as they prefer, including both publicly and privately on and off campus.

For the rest of the participants for which the questions pertained, the most common people to whom participants were out regarding their gender identity was other TGNC friends, with four participants reporting they were completely out to this category, and one participant who reported not being out at all to any other categories of people was out a little to their TGNC friends. All participants were either equally or more out to TGNC friends than other friends/peers and were also equally or more out to cisgender LGBQ+ friends than peers in general. This is reflected in the positive and significant correlations ($p < 0.01$) between being out to general peers on campus and LGBQ+ cisgender friends, between being out to general peers on campus and TGNC friends ($p < 0.01$), as well as a significant correlation between being out to LGBQ+ cisgender friends and TGNC friends ($p < 0.01$) (Table 9).

Only four participants reported being completely out to any of the categories of people (Table 2). A white second-year trans man reported being completely out to their parental figure(s) and siblings but either not at all, a little, or somewhat to everyone else, including TGNC friends. A third-year Canadian international student trans and masculine-of-center man reported being out to peers on campus, LGBQ+ cisgender friends, TGNC friends, professors on campus, and other staff on campus but not at all or somewhat to everyone else. They were the only person to report being completely out to professors and other staff on campus, which was reflected in both of these categories having a mean of 2.00, with standard deviations of 1.323 and 1.179 respectively and each having four responses of “not at all.” The third participant who answered “completely” to any of the categories was a fifth-year or more biracial trans man, who was completely out to their parental figure(s), peers on campus, LGBQ+ cisgender friends, and

TGNC friends. And finally, a fourth-year biracial non-binary participant was out to LGBQ+ cisgender friends in addition to TGNC friends but nobody else. Nobody was completely out to their extended family/relatives, which is reflected in it having the lowest mean of 1.78, with a standard deviation of 1.093.

While being out to one group of people did not guarantee being out to another group to the same degree, there were several significant correlations (Table 9). Keep in mind when interpreting correlation values that all questions regarding who participants were out to and to what degree used the same scale, with “not at all” assigned to the lowest value and “completely” assigned to the highest value. There was a positive Pearson Correlation ($p < 0.01$) between being out to parents and out to siblings. There were also positive correlations between being out to extended family and being out to general peers on campus ($p < 0.01$), cisgender LGBQ+ friends ($p < 0.05$), and TGNC friends ($p < 0.05$). However, there was not significant correlation between being out to extended family and parents or siblings. Additionally, there was a significant correlation ($p < 0.05$) between being open to LGBQ+ friends and being open to professors, as well as between being out to professors and being out to other staff on campus ($p < 0.01$; Table 9).

Additionally, there were also correlations between which group(s) participants were out to and whether they lived in on-campus or off-campus housing. Keep in mind that 30% of participants lived at off-campus housing (Table 1). There were positive and significant correlations between being out to general peers on campus, LGBQ+ cisgender friends, and professors and living on or off campus ($p < 0.01$ for all except professors, for which $p < 0.05$; Table 9). Looking at the data and the values assigned to each variable, this means that those who

lived off campus were more likely to have a higher degree of openness about their gender identity to these groups.

When it came to asking how often participants present as the gender they prefer overall, all participants presented their gender as they preferred at least some of the time (Table 2). The most common answer was “about half the time,” with three participants reporting always presenting their gender as they prefer, two of which were trans men and one of which was the aforementioned feminine-of-center student. However, one of the trans men who said they always present their gender as they prefer also only listed “on campus, privately and publicly” and did not list presenting as they prefer off campus at all, so their level of preferred presentation is ambiguous.

The most common answer regarding the context in which participants presented as the gender they prefer was “on campus, private and public” (n=6; Table 2). Amongst those who answered as such, three also answered that they present as the gender they prefer off campus privately and publicly and one answered that they also present as they prefer off campus privately only. That leaves two who only presented as they prefer on campus and not off campus at all.

Nobody presented as they preferred off campus (whether privately or publicly) and never presented as they preferred in some setting while on campus. Either they presented as they wanted both privately and publicly in both contexts or, in the case of one participant, a non-binary gender fluid white-passing multiracial person, they presented as they wanted both privately and publicly on campus but only privately off campus. There was a positive correlation between participants presenting their gender as they preferred on campus, privately only, and how often they presented their gender they preferred ($p < 0.05$; Table 9). Since presenting as

preferred on campus only privately is mutually exclusive with presenting one's gender as preferred on campus privately and publicly, naturally there was a negative correlation ($p < 0.05$) between presenting on campus privately and publicly and how often participants presented as they preferred (Table 9). Considering how the variables were numbered when calculating correlations, this means that those who presented on campus publicly and privately were more likely to present as they preferred more often than those who only presented as desired on campus in private

Presence of and Importance of Trans-Inclusive Variables at Fitness Centers

Participants were asked if they knew of the presence of gender neutral/inclusive bathrooms, private changing facilities, and single-person showers at their campus fitness centers. The majority said either no or that they did not know for all variables (Table 4). It is notable that nobody knew if there were private changing facilities at their campus fitness centers; one person knew if there were gender neutral/inclusive bathrooms; and two people knew that there were single-person showers. Fifty to sixty percent of participants did not know for each variable. In the case of private changing facilities, this included one person who uses the gym on campus irregularly, and in the case of single-person showers, this included one person who uses the gym irregularly and one who uses it regularly.

Gender neutral/inclusive bathrooms, private changing facilities, and single-person showers at campus fitness centers were all given a mean importance rating between 2.44 and 2.7, which is between somewhat important (assigned a value of 2) and very important (assigned a value of 3; Table 5). The variable with the highest standard deviation was gender-neutral bathrooms, with a SD of 0.727 because one person selected "not important." For the other variables, everyone either selected "somewhat important" or "very important," with the majority

selecting “very important.” Nobody responded with “don’t know” for any of the variables. The importance rating of private changing rooms and single showers positively correlated ($p < 0.05$) (Table 9).

Use of Fitness Centers

Sixty percent (n=6) of participants did not use the fitness center on campus (Table 6). Of those who did, 3 used it irregularly and one used it regularly. Amongst those who did not use the fitness center, two wanted to use it, while 4 (40% of total participants) did not want to use it.

Experience at Fitness Centers

Thirty percent chose “not apply” when it came to the question asking whether they had ever felt unwelcome at a campus fitness center, and one of those who chose “does not apply” is a white feminine-of-center student who had reported irregularly using the fitness center/gym (Table 7). Amongst the remaining 70% who felt it did apply to them, 30% reported having felt unwelcome, while 40% reported not having felt unwelcome. Amongst those who reported having felt unwelcome, only one had reported using the fitness center in the previous question: an East Asian masculine-of-center trans man who reported using the fitness center regularly.

When it came to why those who had felt unwelcome had such experiences (n=3), all answers were selected at least once except for physical abuse from another gym-goer or from staff at the gym, which was never reported. Two of the three who reported having felt unwelcome listed the same answers: “the way you dress; professional staff did not understand your needs; verbal harassment from other gym members (direct or indirect); verbal harassment from gym staff (direct or indirect); felt disrespected by other gym members; felt disrespected by gym staff.” All three listed having felt disrespected by other gym members. The third person, a white trans man, only selected having felt disrespected by other gym members and “other,”

going on to write “I’m stealth so I cannot comfortably wear gym clothes in front of other people without the risk of outing myself” (Table 8).

Why Students do not Use Fitness Center

When asked the open-ended question “if you do not use the campus recreation center/gym, why not?” the seven participants who answered had varied responses. Two answers explicitly included variables related to gender identity. A white trans man explained, “I bind and pack so I hate exercising in front of people because it’s not safe or comfortable to do so while exercising.” A Black masculine-of-center trans man explained, “gyms in general create a lot of anxiety for me and my recent questioning of my gender has warded me off completely.” This response also mentions gyms generally being an unpleasant place to be. A white genderqueer respondent echoed that by saying, “Negative experiences in public places seem to be exponentially worse in gyms, fitness centers, etc. at home. So I’ve decided it’s better not to go to the one on campus at all.” This response also explicitly mentions hating to be in front of people. That sentiment was also illustrated in other responses, although not explicitly because of gender identity. A white androgynous person responded saying they are “not comfortable with the people who also use the gym/don’t want to get looked at.” Additionally, a white genderqueer, gender non-conforming, and questioning respondent specifically said that body positivity issues keep them from going to the gym. Only one response did not explicitly mention any discomfort with being at the gym: a biracial trans man simply said “Not motivated plus don’t like exercising alone.” See Table 8 for all open-ended responses.

Ideas for Improvement

All but one participant responded to the question of “How would you like your college/university to create a more positive experience for trans and gender non-conforming

students in the context of the institution's recreation center(s)/gym(s)?" so the sample size was n=9 (Table 8). Five participants explicitly mentioned gender neutral/unisex/family bathrooms. Out of those five, three also explicitly mentioned gender neutral changing rooms and one mentioned that gender neutral bathrooms could replace locker rooms for those uncomfortable with locker rooms. A biracial trans man said, "maybe more locker rooms that could be a safe zone for us." Two people mentioned offering secluded areas for exercise, with a Black masculine-of-center trans man explaining there could be "smaller rooms for people who tend to get gym anxiety or anxiety just from being around people." That same person also pointed to a desire for trans-specific services, saying "maybe even creating a fitness class for trans and GNC people to focus on parts of their body that could cause them dysphoria," and a white trans man explained that visible inclusion is important, saying, "Honestly, just an acknowledgement that it's a designated space for everyone, like LGBT equality posters and more accessible gender-neutral bathrooms would make these areas feel safer and more comfortable." Eight responses offered suggestions but one response from a white gender nonconforming student instead said, "I'm not sure it's possible." See Table 8 for a full list of responses.

Discussion

Because of the small sample size, data from this study is not conclusive. However, there were some trends that stood out, several of which fell in line with previous research. Additionally, some responses were particularly interesting and worth discussing further. First, it is worth noting that the data collected in this study only represents four-year institutions. Had there been more data, we may have seen similar trends as past research, with two-year and religiously-affiliated institutions having less trans-inclusive variables (Goldberg, et al., 2019). In addition, the majority of respondents (80%) were white or white-passing. While the experiences

of those who are white and those who are multiracial but white-passing cannot be equated, people who are white-passing have the privilege of not looking like a race that faces patterns of discrimination. Thus, the data presented does not have enough non-white-or-white-passing data to compare the responses of the one Black and one East Asian respondents to the others. When the health disparities of Black TGNC people (Lett, et al., 2020, as mentioned in the section on intersectionality) are also taken into account, race stands out as a potential target for future studies like this one.

Another strong leaning of the data is that the vast majority of respondents (90%) were assigned female at birth (AFAB). This is not the first time this trend in respondents has been seen. The majority of respondents to Goldberg, et al.'s 2019 survey were also assigned female at birth. It may be of particular interest to do studies specifically on the experiences of those assigned male at birth (AMAB), especially since, as Goldberg, et al. notes, AMAB people who openly defy gender norms may face greater backlash (Backting, et al., 2013, as cited in Goldberg, et al., 2019).

Regarding “outness” the small number of respondents open about their gender identity to professors and staff on campus supports the idea that more education on TGNC inclusiveness is needed on campus so that students may feel more comfortable being open about their identities when that makes sense. In some cases, there may be no need or desire to be open to professors and staff. However, particularly when it means using someone's preferred pronoun, professors and faculty would ideally be equipped to respond in an inclusive manner, and there may be a need for more visible inclusion on this front, since situational avoidance may already be at play based on previous experiences. As the 2020 mental health survey by the Trevor Project shows, everyday experiences such as whether those around you use your preferred pronouns can have

positive impacts on mental health and suicide prevention (Trevor Project, 2020). This may be especially important considering that college is a place that many choose to transition (Conway, 2004, as cited in Story, 2017), making experiences there especially formative. That said, considering the correlation found between being open to LGBTQ+ cisgender friends and professors, it is possible that students' willingness to be open to professors may have just as much to do with their other social experiences as it has to do with the professors' attitudes and actions. When looking at data regarding where students presented as they preferred, the prevalence of presenting as preferred on campus more often than off campus may further the claim that students generally feel that college campuses are a more accepting environment (Conway, 2004, Epstein, et al., 2003, as cited in Story, 2017).

I wanted to note the feminine-of-center respondent who chose "does not apply" regarding to whom they are out. While it cannot be said for sure why they indicated "does not apply," it is possible that identifying as feminine of center while one was assigned female is not an identity to be "out" about for this person. It is even possible that this participant also identifies as female, but did not indicate it in the "other" box because the question could have been construed to mean "what are your non-cis/binary gender identities" and it did not occur to them that a cis/binary gender identity could be indicated. No matter the reasons, this is a reminder that not all non-cis/binary gender identities are something to be "out" about, as there is a lot of nuance here and varying degrees of divergence from cis/binary gender identities.

Consistent with the findings of Goldberg, et al. (2019), gender neutral/inclusive bathrooms, private changing facilities, and single-person showers were all considered generally important by respondents. It seems that, with all available data, there is an overall consensus that TGNC people would like greater access to gender-neutral bathrooms. Also consistent with

Goldberg's findings, there was a high rate of respondents not knowing whether a trans-inclusive resource was available on their campus, once again pointing to the need for inclusion to not just exist, but to be visible. In such a small study, with 40% of respondents saying that they do not currently desire to use the fitness center, it is possible that some do not know simply because they are not interested. However, it is not possible to know whether they may be more interested if inclusion was more visible.

Since so few people did use the gym on campus, that makes data on their experiences difficult to make many conclusions from. However, respondents' answers regarding why they do not use the gyms on campus was still illuminating. Amongst those who did not use the gym, it is clear that, at times, TGNC people avoid fitness facilities on campus due to their gender identity. Several responses regarding why people did not use the gym also included a sense of being uncomfortable and not wanting to be seen. There was clear evidence of situational avoidance in one response to the question of why participants did not use the campus fitness center: "Negative experiences in public places seem to be exponentially worse in gyms, fitness centers, etc. at home. So I've decided it's better not to go to the one on campus at all." While, once again, the sample size makes clear conclusions impossible, this shows that past experiences are already at play when students come on campus. This makes sense, considering previous research that report TGNC people avoiding gyms for fear of being harassed (Story, 2017). One respondent also explained that they could not use the gym without outing themselves, since gym clothes don't allow them to pass as a trans man. This fear makes sense: while being out has been associated with positive mental health effects, it is also linked with more discrimination (Davidson, 2016, Legate, et al., 2012, as cited in Goldberg, et al., 2019).

Two responses to the question regarding how campus fitness centers could be improved mentioned TGNC-specific spaces, with one saying “maybe more locker rooms that could be a safe zone for us,” and another suggesting “creating a fitness class for trans and GNC people to focus on parts of their body that could cause them dysphoria.” This is seemingly an extension of what Goldberg, et al. (2019) found, when they received response expressing a desire for trans-specific spaces on the campus as a whole. Trans-specific spaces could also help foster the positive relationships and social experiences that help to boost the mental health benefits of exercise (Fontaine, 2000, as cited in Story).

Some of the suggestions made by the respondents to the open-ended question regarding improvements that could be made may also benefit those who are not TGNC, but rather are anxious being at the gym and/or don’t want others to look at them, such as more secluded/small spaces for people to exercise. In addition, family bathrooms could double as a convenient place for anyone to change, who would like to be somewhere more private. Private changing areas and showers, which were rated as important, may also make the gym a more comfortable and less intimidating place for all sorts of people. It may promote more gym use in general if gyms had adaptations that made it a less “on display” sort of experience.

One respondent, when asked how campus fitness centers could be improved to create a more positive experience for TGNC students, said that they were not sure if it’s possible. There are several possible implications of this response worth exploring. To begin, the negative experiences of TGNC individuals at campus fitness centers are clearly not limited to campus fitness centers and thus cannot be entirely remedied by policy and facility changes. All three respondents who reported having felt unwelcome at their campus gym said that a reason for feeling unwelcome was having felt disrespected by other gym members, which is something that

policies can only go so far to remedy. Institutional changes can improve the situation, but still others may hold anti-trans prejudice. Similarly, when Goldberg, et al. (2019) explained that religious institutions are generally less inclusive of TGNC individuals, they went on to suggest that consultants seeking to change this address the broader culture in which the school is embedded. While these suggestions are valid and progress should be pursued, it is also important to keep in mind that religious ideology that teaches that bending or breaking gender norms is wrong is often deep-rooted and difficult to change. While studies such as this one operate on an inherent optimism that change is possible and can be pursued in part by changes within fitness centers, they are still impacted by the larger world.

It's notable that 30% of respondents, in such a small sample size, reported having a disability. There was not a significant correlation between disability status and use of the gym. That said, there is little, if any, research specifically on the experiences of TGNC people with disabilities on college campuses, as well as fitness centers. This may particularly important when it comes to the use of facilities and bathrooms on campus, since the reason this question was included in the first place was because Goldberg, et al. (2019) received a survey response saying that, when gender-neutral bathrooms are available, sometimes they are not disability accessible.

There are variables not included in this study that may provide additional insight into the experiences of TGNC people and the demographic variables that could impact their experiences. The first is the inclusion of sexual orientation in the demographic section. As shown in a 2020 study by Herrick and Duncan published in the *Journal of Sport and Exercise Psychology*, this factor may impact the locker room dynamics and experiences of adults, regardless of whether someone is cisgender or not. Sexual orientation may particularly impact body image, which was a noted issue when it comes to fitness center experiences as a whole in the current study.

Another variable that was not included in this study but could have been is whether someone is transitioning and how long they have been doing so. Not all TGNC individuals undergo major transitioning, but for those who do, the findings in Story (2017) suggest it impacts situational avoidance. Therefore, future research may look into the experiences and needs of those at different stages of transitioning, particularly those who are in their first year of transitioning, as Story (2017) found people more frequently avoided gyms when they had been transitioning for less time.

Some themes regarding how campuses as a whole could be more inclusive emerged in the qualitative results of Goldberg, et al. (2019) that could indirectly impact the experiences of TGNC students at a fitness facility. They are suggestions that could be further explored in future studies. These include trans-inclusive training for students, through orientations and curricular changes, training for faculty/staff, and nondiscrimination policies to which people are held accountable. There were also themes that could be implemented in unique ways to a fitness facility. This included the ability to officially change one's name and gender, which would be reflected on any fitness facility paperwork; and inclusive gender options on paperwork, which could also be reflected on any fitness-facility-specific paperwork.

Overall, the data of the current study suggested on a small scale that, consistent with past data, TGNC individuals do avoid the gym at times due to fear of a negative experience due to their gender identity. Much of the data was not surprising based on past research, although a larger sample size would be needed to see clear trends.

Limitations

The most prominent limitation of the current study is the lack of participants, which is closely linked to the lack of time that could be spent on recruitment. Recruitment only lasted for

a few weeks and, thus, the organizations and offices from other colleges involved in recruitment did not have very much time to act upon the email sent to them, and for participants at any college involved, there was limited time to complete the survey once recruitment materials were sent out.

The COVID-19 pandemic also posed a limitation in the sense that data produced may have been more ambiguous, due to participants having to judge what their behavior would generally be without the pandemic. Recruitment was also impacted by the pandemic as the use and effectiveness of physical flyers was limited due to campuses either being closed or, if open, there being fewer students than usual on campus.

Conclusion

While these results are not conclusive, the current study supports the idea that college campuses need to improve when it comes to the inclusion and support of TGNC people, and that this concept extends into campus fitness centers. Facility factors such as gender-inclusive bathrooms are consistently seen as important in all areas of campus, but this study also points to the nuanced nature of inclusion as a whole. Fitness center climate cannot be addressed as an isolated issue but rather, at times, the environment of the fitness center is an extension of the larger cultural and systematic issues that impact the college campus as a whole. Moreover, the improvement of campus fitness facilities cannot be done without the direct input of TGNC people, as their accounts and suggestions provide much needed insight. Because the gender binary is upheld in so much of daily life, this is a multi-layered process, but visibility and inclusion has the potential to greatly improve the mental and physical health of the TGNC population.

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Table 1. Student Demographic Variables

Student Characteristic	N (% of total)
Residence	
East	1 (10%)
Midwest	1 (10%)
South	8 (80%)
International Status	
Yes (from Canada)	1 (10%)
Race	
White Only	5 (50%)
Not White-Only	5 (50%)
East Asian Only	1 (10%)
Black Only	1 (10%)
Biracial/Multiracial	3 (30%)
White Passing	
Yes	3, all biracial/multiracial (30%)
No	7 (70%)
Gender Assigned at Birth	
Female	9 (90%)
Male	1 (10%)
Gender Identity¹	
Transgender/Trans	2 (20%)
Nonbinary	2 (20%)
Genderqueer	1 (10%)
Trans Man	4 (40%)
Gender Nonconforming	1 (10%)
Gender Fluid	1 (10%)
Masculine of Center	2 (20%)
Feminine of Center	1 (10%)
Androgynous	1 (10%)
Questioning	1 (10%)

Disability	
Yes	3 (30%)
No	7 (70%)

¹Because participants could select more than one response, these percentages will add up to more than 100.

Table 2. Level of “Outness” Regarding Gender Identity

Degree Open/Out to:	Mean	Standard Deviation	N (% of Total)
Parents/Parental Figure	2.44	1.667	
Not at All			4 (40%)
A Little			1 (10%)
Somewhat			2 (20%)
Mostly			0
Completely			2 (20%)
Sibling(s)	2.22	1.481	
Not At All			4 (40%)
A Little			2 (20%)
Somewhat			1 (10%)
Mostly			1 (10%)
Completely			1 (10%)
Extended Family	1.78	1.093	
Not At All			5 (50%)
A Little			2 (20%)
Somewhat			1 (10%)
Mostly			1 (10%)
Completely			0
Peers	3.00	1.500	
Not At All			2 (20%)
A Little			1 (10%)
Somewhat			3 (30%)
Mostly			1 (10%)

Completely			2 (20%)
LGBQA+ Cisgender Friends	3.44	1.424	
Not At All			1 (10%)
A Little			1 (10%)
Somewhat			3 (30%)
Mostly			1 (10%)
Completely			3 (30%)
TGNC Friends	4.00	1.195	
Not At All			0
A Little			1 (10%)
Somewhat			2 (20%)
Mostly			1 (10%)
Completely			4 (40%)
Professors	2.00	1.323	
Not At All			4 (40%)
A Little			3 (30%)
Somewhat			1 (10%)
Mostly			0
Completely			1 (10%)
University Staff	2.00	1.323	
Not At All			4 (40%)
A Little			3 (30%)
Somewhat			1 (10%)
Mostly			0
Completely			1 (10%)
How Often Present Gender as Preferred Overall	3.500	1.179	
Contexts Present Gender as Preferred:			N (% of Total)
On Campus, Privately Only			4 (40%)
Off Campus, Privately Only			1 (10%)

On Campus, Privately and Publically	6 (60%)
Off Campus, Privately and Publically	4 (40%)

Table 3. Institutional Variables	N (% of Total)
Public	4 (40%)
Private	6 (60%)
Religiously Affiliated	2 (20%)
Non-Religiously-Affiliated	7 (70%)
Don't Know Affiliation	1 (10%)
Four Year Housing	10 (100%)
Campus Housing	7 (70%)
Off-Campus Housing	3 (30%)

Table 4. Presence of Fitness Facility Variables	N (% of Total)
Gender Neutral/Inclusive Bathrooms	
Yes	1 (10%)
No	4 (40%)
Don't Know	5 (50%)
Private Changing Facilities	
Yes	0
No	5 (50%)
Don't Know	5 (50%)
Single Person Showers	
Yes	2 (20%)
No	2 (20%)
Don't Know	6 (60%)

Table 5. Importance of Fitness Facility Variables

Facility Variable and How Important	Mean Importance Rating ²	Standard Deviation of Importance Rating ²	N (% of Total)
Gender Neutral/ Inclusive Bathrooms	2.44	0.727	
Not			1 (10%)
Somewhat			3 (30%)
Very			5 (50%)
Don't Know			0
Private Changing Facilities	2.88	0.422	
Not			0
Somewhat			2 (20%)
Very			8 (80%)
Don't Know			0
Single Person Showers	2.7	0.483	
Not			0
Somewhat			3 (30%)
Very			7 (70%)
Don't Know			0

²Numbers assigned to responses for mean and standard deviation: Not Important- 1, Somewhat Important- 2, Very Important- 3, Don't Know- 4

Table 6. Use of Campus Fitness Center

	N (% of Total)
Use of Fitness Center	
Yes, Regularly	1 (10%)
Yes, Irregularly	3 (30%)
No	6 (60%)
Desire to Use Fitness Center³	
Yes	2 (33.3%)
No	4 (66.7%)

³This question only applied to those who do not currently use the fitness center and the percentages reflect the percentage of the total people who do not currently use the fitness center.

Table 7. Felt Unwelcome at Fitness Center

	Mean	Standard Deviation	N (% of Total)
Felt Unwelcome			
Yes			3 (30%)
No			4 (40%)
Does Not Apply			3 (30%)
How Often ^{4, 5}	3.00	0	
Rarely			0
Half of the Time			0
Most of the Time			3 (100%)
Reason for Feeling Unwelcome ⁵			
The way you dress			2 (66.7%)
Professionals did not understand your needs			2 (66.7%)
Verbal harassment from gym members			2 (66.7%)
Verbal Harassment from Gym Staff			2 (66.7%)
Felt Disrespected by Other Gym Members			3 (100%)
Felt Disrespected by Gym Staff			2 (66.7%)
Other ⁶			1 (33.3%)

⁴Numbers assigned to responses to calculate mean and standard deviation: Rarely – 1, Half of the Time- 2, Most of the Time- 3.

⁵These question was only asked of those who had reported ever feeling unwelcome. The percentages reflect the percentage of those for whom the question applies, not the percentage of total study participants.

⁶See Table 8 for response.

Table 8. Open Ended Responses

Question	Responses
<p>If you do not use the campus recreation center/gym, why not?</p>	<p>Not comfortable with the people who also use the gym/don't want to get looked at</p> <p>I bind and pack so I hate exercising in front of people because it's not safe or comfortable to do so while exercising.</p> <p>Not comfortable with being there</p> <p>Negative experiences in public places seem to be exponentially worse in gyms, fitness centers, etc. at home. So I've decided it's better not to go to the one on campus at all.</p> <p>Not motivated plus don't like exercising alone</p> <p>Gyms in general create a lot of anxiety for me and my recent questioning of my gender has warded me off completely.</p> <p>Body positivity issues</p>
<p>How would you like your college/university to create a more positive experience for trans and gender-non-conforming students in the context of the institution's recreation center(s)/gym(s)?</p>	<p>Create gender neutral bathrooms and changing rooms</p> <p>Add unisex bathroom option for those uncomfortable with locker rooms</p>

Secluded options for exercise

Maybe have family bathrooms so if you don't feel like going into men or women's or feel uncomfortable doing so you have a 3rd option that is neither.

Honestly, just an acknowledgement that it's a designated space for everyone, like LGBT equality posters and more accessible gender-neutral bathrooms would make these areas feel safer and more comfortable.

Gender inclusive changing rooms and bathrooms

I'm not sure it's possible.

Not sure, maybe more locker rooms that could be a safe zone for us.

Gender neutral bathrooms and changing rooms, having smaller rooms for people who tend to get gym anxiety or anxiety just from being around people. Maybe even creating a fitness class for trans and GNC people to focus on parts of their body that could cause them dysphoria.

I'm stealth so I cannot comfortably wear gym clothes in front of other people without the risk of outing myself.

Why have you felt unwelcome at your campus recreation center(s)/gym(s)? – Other

Appendix A.

Key Terms and Definitions

Agender People: Individuals who identify as not having a gender. Agender people may identify as genderless, gender-neutral or neutrosis, having an unknown or indefinable gender, or deciding not to label their gender.¹

Androgynous People: Individuals whose gender identity and expression combine both traditionally feminine and masculine characteristics, although not necessarily in equal amounts.

Bigender People: Individuals who experience their gender identity as two genders at the same time or whose gender identity may vary between two genders.¹

Cisgender (Cis) People: Individuals who identify with the gender that was assigned them at birth (i.e. people who are not trans).¹ The gender identities of those who are cis also fit into the gender binary (either man or woman).

Cisnormativity: The pervasive cultural belief that gender identities are only binary, are the same as the gender assigned to someone at birth, and are defined by one's body. Cisnormativity perpetuates the idea that cisgender identities are more natural and superior to non-cis/binary gender identities.²

Demigender People: Individuals who feel a partial connection to a particular gender identity. Examples of demigender identities include demigirl, demiboy, and demiandrogyne.¹

Feminine of Center People: Individuals assigned male at birth who tend toward the feminine in their gender identity/expression.¹

Gender Assigned at Birth: Sex designation given at birth, typically based on one's genitals. Most people are assigned female at birth (AFAB) or assigned male at birth.¹

Gender Binary: The social system that sees only two genders and that requires everyone to be raised as a man or a woman, depending on the gender assigned to them at birth.¹

Intersex: An umbrella term used to describe a wide range of natural biological variations of individuals who are born with a chromosomal pattern, a reproductive system, and/or sexual anatomy that does not fit typical binary notions of male or female bodies.¹

Gender-Inclusive Facilities: Bathrooms, restrooms, and locker rooms that are open to people of all genders. They may be single-or multiple-user facilities.¹

Gender Non-Conforming People: Individuals who do not adhere to the traditional gender expectations for appearance and behavior of their assigned gender. Some identify as transgender, but others do not.¹

Genderqueer People: Individuals who identify as neither male nor female (but as another gender), as somewhere in between or beyond genders, or as a combination of genders.¹

Gender-Fluid People: Individuals whose gender varies over time. A gender-fluid person may at any time identify as male, female, agender, or any other nonbinary gender identity, or as some combination of gender identities.¹

Masculine of Center People: Individuals assigned female at birth who tend toward the masculine in their gender identity/expression.¹

Nonbinary Gender Identity: Any gender identity that does not fit into the binary of male/man or woman/female.

Queer: An umbrella term to refer to all LGBTQ people. It is also a nonbinary term used by individuals who see their sexual orientation and/or gender identity as fluid or as not fitting into a “box.”¹

Questioning People: Individuals who are uncertain about how they identify their gender and/or sexuality.¹

Transgender (Trans): The umbrella term for those who do not identify as the gender assigned to them at birth (i.e. they are not cisgender).³ Transgender people may have binary or nonbinary gender identities.⁴ The term “trans” often implies a degree of transitioning one’s appearance and/or body to reflect their gender identity, although they also may not undergo any transition in appearance, including not undergoing any biomedical transitions, even if their gender identity is binary.⁵

Two Spirit People: A Native American term for individuals who blend the masculine and the feminine. It is commonly used to describe individuals who historically crossed genders. It is also often used by contemporary LGBTQIA Native American people to describe themselves.¹

¹ Definition (or part of definition preceding the “1”) quoted verbatim from Goldberg, et al. (2019).

²Paraphrased from Goldberg, et al. (2019), who cited Enke (2012a) when explaining these concepts.

³Paraphrased from Goldberg, et al. (2019), who cited Enke (2012b) and Stryker (2008) in this portion of the definition.

⁴ Paraphrased from Goldberg, et al. (2019), who cited Stryker (2008) to describe binary trans people and Nicalazzo (2016) to describe nonbinary trans people.

⁵Paraphrased from Goldberg, et al. (2019), with addition from author (“often implies a degree of often implies a degree of transitioning one’s appearance and/or body to reflect their gender identity”), who cited Catalano, 2015.

Appendix B.

The Questionnaire

Transgender and Gender Non-Conforming Students' Perspectives on Inclusion within the Context of College Recreation Centers

PURPOSE OF THIS STUDY: The purpose of this study is to gain further understanding of 1) the experiences of transgender and gender non-conforming undergraduate and graduate students within the setting of campus recreation centers/gyms, and 2) ways in which campus recreation centers/gyms can be improved, in any manner, to promote positive experiences for transgender and gender non-conforming students.

WHO IS ELIGIBLE TO PARTICIPATE? This study pertains to trans and gender non-conforming undergraduate and graduate students. You may participate if BOTH of the following apply to you: 1) You do not exclusively identify as cisgender. Being cisgender means that your gender identity is binary (male/man or female/woman) and your gender identity matches the gender you were assigned at birth. Anyone who does not exclusively identify as cisgender may fill out this survey. This includes those who are questioning their gender identity. 2) You are an undergraduate student, a recently graduated (in the last year) undergraduate student, a graduate student, or a recently (in the last year) graduated graduate student.

POSSIBLE IMPLICATIONS: The conduction of this survey may help transgender and gender non-conforming people's experiences become more visible in the context of academic inquiry and research. Answers to this survey may aid in the development of better practices and facilities in campus recreation centers/gyms, thus decreasing barriers discouraging transgender and gender non-conforming people from using those facilities and their services.

ARE MY ANSWERS ANONYMOUS? Yes. To begin, no names will be requested or collected. While demographic information is being collected and will be reported when referring to participants responses (e.g. "a white-passing multiracial student who identifies as genderqueer reported [excerpt from participant's response]"), data is being collected from a number of colleges and universities and the names of the colleges/universities that participants attend will not be requested. Therefore, the demographic information being shared will not make participants personally identifiable. Note that collected data may be used and analyzed beyond this particular study.

MAINTAINING CONFIDENTIALITY: Entire surveys for any one individual will not be shared as a unit, such that it is clear that all of those answers came from one person. Survey data will be kept on a locked computer.

WHAT ARE THE RISKS AND BENEFITS TO ME? The risks associated with participation in this study are minimal. Some of the questions will ask you to report on your experiences (positive or negative) in campus recreation centers/gyms, as well as your level of "outness" regarding your gender identity. This may make you uncomfortable. To find an LGBTQ+ community center in your area that may offer you support, go to

<https://www.lgbtcenters.org/LGBTCenters> This study may benefit participants by displaying interest in their experiences, personal perspectives, and opinions, thus promoting a sense of visibility/belonging/positive feelings. You may skip questions. You may also stop taking the survey any time before submission. If you do not submit the questionnaire, your answers will be disregarded and will not be included in the data of this study, nor will your answers be reported whatsoever.

CONTACT INFORMATION: If you have concerns or questions about this study, please contact Rachel Petterson (she/her) at rpetterson@eagles.bridgewater.edu. You may also contact Tammy Sheehy (she/her) at tsheehy@bridgewater.edu or 540-828-5728. You may contact the Bridgewater College Institutional Review Board: Erin Morris Miller (IRB Chair) at emmiller@bridgewater.edu or 540-828-5621

PARTICIPANT'S STATEMENT OF INFORMED CONSENT: If you agree with the following statements and wish to participate in this study, please click "I agree" below. If you do not agree, and do not wish to participate, simply close this webpage. Participation in this study is entirely voluntary.

NOTE ABOUT IMPACT OF COVID-19 PANDEMIC: Some of these questions ask about your use of campus recreation centers/gyms. If you are currently unable to use campus recreation centers/gyms due to your campus and/or campus gym being closed in light of the current pandemic, please report as best you can about your usual non-pandemic use (or non-use) of the campus recreation centers/gyms.

I am at least 18 years of age and have read and understand the explanations of the study provided to me. I voluntarily agree to participate in this study.

I agree

1. Where do you reside in the US:
 - i. What region?
 - 1 - Midwest (ND, SD, NE, KS, MO, IA, MN, WI, IL, IN, MI, OH)
 - 2 - South (TX, OK, AR, LA, MS, AL, GA, FL, TN, KY, WV, VA, NC, SC, DE, MD, DC)
 - 3 - Northeast (PA, NY, ME, NH, VT, MA, RI, CT, NJ)
 - 4 - West (WA, OR, CA, NV, ID, MT, WY, CO, NM, UT, AZ)
 - 5 - Hawaii
 - 6 - Alaska
2. Are you an international student?
 - 1 – yes

from where? (box)
 - 2 - no

3. What is your current student status?
 - 1 - first-year undergraduate
 - 2 - second-year undergraduate
 - 3 - third-year undergraduate
 - 4 - fourth-year undergraduate
 - 5 - fifth-year and above undergraduate
 - 6 - recent graduate (in the past year) from undergraduate program (and not a graduate student)
 - 7 - recently graduated from a graduate program
 - 8 - current graduate student
4. What race do you identify as?
 - 1 - White only
 - 2 - Non-white-only:
5. Non- white Race:
 - 1 - Latin/a/x/Latin American only
 - 2 – East Asian only
 - 3 – South Asian Only
 - 4 - Black only
 - 5 - Native American/Indigenous only
 - 6 - Middle Eastern only
 - 7 - Biracial/multiracial (multiple races)
 - 8 – Other (box)
5. If non-white, are you white-passing?
 - 1 - yes
 - 2 - no
6. What was your gender assigned at birth?
 - 1 - female
 - 2 - male
 - 3 - intersex, assigned female
 - 4 - intersex assigned male
 - 5 - other
7. What is your gender identity? You may choose multiple options.
 - 1- transgender/trans
 - 2 - nonbinary
 - 3 - genderqueer
 - 4 - trans man
 - 5 - trans woman
 - 6 - gender nonconforming
 - 7 - gender fluid
 - 8 - agender
 - 9 - masculine of center
 - 10 - feminine of center
 - 11 - androgynous
 - 12 - questioning
 - 13 - demigender
 - 14 - bigender

15 - Other identities not listed with textbox (ex: man, woman, demigirl, neutrois, two spirit, third gender)

8. How open/out are you about your gender identity to:

- a. parents
 - 1 – not at all
 - 2 – a little
 - 3 – somewhat
 - 4 –mostly
 - 5 – completely
- b. siblings
 - 1 – not at all
 - 2 – a little
 - 3 – somewhat
 - 4 –mostly
 - 5 – completely
- c. extended family/relatives
 - 1 – not at all
 - 2 – a little
 - 3 – somewhat
 - 4 –mostly
 - 5 – completely
- d. peers on campus, in general
 - 1 – not at all
 - 2 – a little
 - 3 – somewhat
 - 4 –mostly
 - 5 - completely
- e. your LGBTQA+ cisgender friends
 - 1 – not at all
 - 2 – a little
 - 3 – somewhat
 - 4 –mostly
 - 5 - completely
- f. your trans/gender-nonconforming friends
 - 1 – not at all
 - 2 – a little
 - 3 – somewhat
 - 4 –mostly
 - 5 - completely
- g. professors
 - 1 – not at all
 - 2 – a little
 - 3 – somewhat
 - 4 –mostly
 - 5 - completely
- h. university staff

- 1 – not at all
 - 2 – a little
 - 3 – somewhat
 - 4 –mostly
 - 5 – completely
9. In what context do you currently present your gender as you prefer to?
- 1- on campus, privately only
 - 2 - off campus, privately only
 - 3 - on campus, privately and publically
 - 4 - off campus, privately and publically
10. How often, including both public and private contexts, do you present your gender as you prefer ?
- 1 - never
 - 2 - sometimes
 - 3 - about half the time
 - 4 – most of the time
 - 5 - always
11. Do you have a disability?
- 1 - yes
 - 2 - no
12. Do you attend:
- 1- a public institution
 - 2 - a private institution
13. Do you attend:
- 1- a religiously affiliated institution
 - 2 - a nonreligious institution
 - 3 - don't know
11. Do you attend:
- 1 - a two-year institution
 - 2 - a four-year institution
 - 3 - other
14. Do you currently live in campus housing or off-campus housing? If living on campus is currently not allowed due to COVID, select where you most recently or most generally live.
- 1 - campus housing
 - 2 - off-campus housing

Open Ended Question:

If you do not use the campus recreation center/gym, why not?

How would you like your college/university to create a more positive experience for trans and gender-non-conforming students in the context of the institution's recreation center(s)/gym(s)?

Closed-Ended Questions:

1. Does your college recreation center(s)/gym(s) have gender-neutral/gender-inclusive bathrooms?
 - 1 - yes
 - 2 - no
 - 3 - don't know
2. How important to you are gender-neutral/gender-inclusive bathrooms at campus recreation center/gym?
 - 1- not important
 - 2- somewhat important
 - 3 - very important
 - 4 – don't know
3. Does your campus recreation center(s)/gym(s) have private changing facilities?
 - 1 - yes
 - 2 - no
 - 3 - don't know
4. How important to you are private changing facilities at campus recreation center/gym?
 - 1 - not important
 - 2 - somewhat important
 - 3 - very important
 - 4 – don't know
5. Does your campus recreation center(s)/gym(s) have single-person showers?
 - 1 - yes
 - 2 - no
 - 3 - don't know
6. How important to you are single-person showers at campus recreation center/gym?
 - 1 - not important
 - 2 - somewhat important
 - 3 - very important
7. During non-pandemic circumstances, do you use the campus recreation center(s)/gym(s)? This includes individual exercise and classes held by the center, such as group fitness classes.
 - 1 - yes, regularly
 - 2 - yes, irregularly
 - 3 - no
 - i. Do you have a desire to use campus recreation center(s)/gym(s)?
 - 1 – yes
 - 2 - no
8. Have you ever been made to feel unwelcome at a gym/fitness center on campus due to your gender identity?
 - 1 - yes
 - i. how often?
 - 1- rarely
 - 2 - about half of the time

- 3 – most of the time
- ii. Why have you felt unwelcome at your campus recreation center (choose as many as apply):
- 1 - the way you dress
 - 2 - professional staff did not understand your needs
 - 3 - verbal harassment from other gym members (direct or indirect)
 - 4 - physical abuse from other gym members
 - 5 - verbal harassment from gym staff (direct or indirect)
 - 6 - physical abuse from gym staff
 - 7 - felt disrespected by other gym members
 - 8 - felt disrespected by gym staff
 - 9 - other (include textbox)
- 2 - no
- 3 - does not apply to your experience

To find an LGBTQ+ community center in your region, visit
<https://www.lgbtcenters.org/LGBTCenters>