EXAMINING THE ACADEMIC OUTCOMES OF 2SLGBTQ+ UNIVERSITY STUDENTS IN ONTARIO: MICROAGGRESSIONS AND THE MEDITATING ROLE OF PSYCHOLOGICAL WELL-BEING

MICHAEL R. WOODFORD
WILFRID LAURIER UNIVERSITY

TIN D. VO
UNIVERSITY OF TORONTO

HARRISON OAKES
WILFRID LAURIER UNIVERSITY

BRANDON R. G. SMITH
WILFRID LAURIER UNIVERSITY

Abstract

Research on trans and LGBQ microaggressions on campuses and their consequences has grown, yet this literature is primarily from the United States and the effects of microaggressions on academic outcomes remain generally under-investigated. Trans/LGBQ microaggressions can negatively affect students' psychological well-being, which matters for their academic outcomes, suggesting well-being might mediate the impact of microaggressions on academic outcomes. Using a convenience sample of 2SLGBTQ+ university students from Ontario (N = 3,344), we examine the association between trans/LGBQ microaggressions and academic satisfaction and school avoidance, testing if they are mediated by psychological well-being, controlling for demographics. We report findings for trans/LGBQ microaggressions separately to centre trans and gender-diverse (TGD) students' experiences. For both groups, we found that microaggressions were associated with poorer academic outcomes. Except for one pathway among TGD students, we found that psychological well-being mediated the microaggressions–academic outcome relationships. We offer implications to support student services that are responsive to 2SLGBTQ+ students.

***Keywords**:* campus climate, microaggressions, exclusion, minority stress, distress, academic engagement and development

Résumé

Les recherches sur les microagressions contre les personnes trans et LGBQ sur les campus et sur leurs conséquences se sont multipliées. Toutefois, la littérature provient principalement des États-Unis, et les effets des microagressions sur les résultats universitaires restent peu étudiés. Les microagressions contre les personnes étudiantes trans et LGBQ peuvent affecter négativement leur bien-être psychologique et, par le fait même, leurs résultats universitaires. En utilisant un échantillon de commodité de personnes étudiantes 2SLGBTQ+ dans des universités de l'Ontario (N = 3 344), nous examinons l'effet des microagressions sur la satisfaction universitaire et l'évitement scolaire, en testant si les résultats sont médiés par le bien-être psychologique et en contrôlant les données démographiques. Nous rapportons séparément les résultats concernant les microagressions contre les personnes trans et LGBQ afin de mettre en lumière les expériences particulières des personnes étudiantes trans et de la diversité de genre. Pour les deux groupes, nous avons constaté que les microagressions étaient associées à de moins bons résultats universitaires. Sauf pour une voie parmi les personnes étudiantes trans et de la diversité de genre, nous avons constaté que le bien-être psychologique médiait les relations entre microagressions et résultats universitaires. Nous proposons des pistes pour offrir à la population étudiante 2SLGBTQ+ des services qui répondent à ses besoins.

Mots clés : Climat sur les campus, microagressions, exclusion, stress lié au statut de minorité, détresse, engagement et développement universitaires

INTRODUCTION

Despite federal and provincial legal protections for Two-Spirit, lesbian, gay, bisexual, trans, queer, and other sexually and gender-diverse (2SLGBTQ+) people and institutional anti-discrimination statements enumerating gender, gender expression, and sexual orientation, 2SLGBTQ+ students in Canada are marginalized on university and college campuses. These students often feel unsafe and experience discrimination (Burczycka, 2020; Woodford et al., 2019), including everyday microaggressions, such as being ignored or excluded (Burczycka, 2020). Their marginalization is rooted in cisgenderism and heterosexism—systems of oppression that privilege cisgender and heterosexual identities and behaviours and marginalize all others (Woodford et al., 2016). A hostile climate can undermine students' well-being and academic outcomes.

Growing attention has been given to microaggressions targeting 2SLGBTQ+ post-secondary students (see Maji & Sarika, 2024 for a systematic review), including studies exploring microaggressions based on gender (trans microaggressions) and sexual orientation (LGBQ microaggressions), separately (Woodford, Weber, et al., 2018), shedding light on the differential impacts of microaggressions for each subgroup. While informative to the field, this literature is primarily from the United States (U.S.), as evidenced by Maji and Sarika's (2024) review, which included 44 studies, with only four studies conducted in Canada. Therefore, current research may have limited transferability to the Canadian context where 2SLGBTQ+ people tend to be more accepted (Flores, 2021) and have more comprehensive and stable rights than in the United States (Equaldex, n.d.), though such rights are under threat in both countries today, especially in the United States (American Civil Liberties Union, n.d.; Egale, 2024). Also, in recent years, attention to the experience of 2SLGBTQ+ students has grown, with some campuses starting 2SLGBTQ+ student supports, such as 2SLGBTQ+ resource centres or hiring staff to work specifically with this pop-

ulation, which reinforces the need for Canadian research to inform these services. Moreover, in understanding the consequences of microaggressions thus far, researchers have focused on psychological outcomes with minimal attention to academic outcomes (Maji & Sarika, 2024), and no research has examined whether psychological well-being mediates the association of microaggressions and academic outcomes.

Guided by a conceptual framework that draws on theories and models of student development and engagement and minority stress, we aim to close these gaps by utilizing data from a large-scale survey conducted with 2SLGBTQ+ university students throughout Ontario to explore the relationship between microaggressions and students' academic satisfaction and engagement in school avoidance behaviours. Because microaggressions can negatively affect students' psychological well-being (Maji & Sarika, 2024; Woodford, Weber, et al., 2018), and because well-being influences students' academic engagement and development (Marmolejo et al., 2024), we investigate the possible mediating role of psychological well-being on the microaggressions–academic outcomes relationship. We examine the role of trans and LGBQ microaggressions separately because trans and gender-diverse (TGD) students experience greater victimization than their sexual minority (LGBQ) peers (Rankin et al., 2010; Woodford, Weber, et al., 2018), including on Canadian campuses (Woodford et al., 2019). Trans and gender-diverse students also face unique challenges related to their gender, such as being misgendered or not being able to access inclusive restrooms or housing. Moreover, for psychological well-being, research suggests each subgroup is impacted differently by microaggressions in terms of their magnitude (Woodford, Weber, et al., 2018). In addition to advancing knowledge, we hope our findings inform institutional efforts to foster inclusion for diverse 2SLGBTQ+ students and develop responsive student services and programs.

2SLGBTQ+ MICROAGGRESSIONS ON CAMPUS

Microaggressions refer to "everyday verbal, nonverbal, and environmental slights, snubs, or insults, whether intentional or unintentional, that communicate hostile, derogatory, or negative messages to target persons based solely upon their marginalized group membership" (Sue, 2010, p. 3)—gender and sexual orientation, in the case of 2SLGBTQ+ students. They occur in interpersonal exchanges and environmentally through policies and practices. Microaggressions are often unconscious and unintentional on the part of the perpetrator and comprise microinvalidations (dismissing one's identity or experiences), microinsults (reflecting insensitivity and rudeness), and microassaults (degrading and dehumanizing), with the latter often being explicit and intentional (e.g., using a transphobic slur; Sue, 2010). Regardless of the type and explicitness of the microaggression, their underlying message is one of othering, hostility, and bias toward the target (Sue, 2010). Considering their nature, microaggressions—especially subtle manifestations—can be perpetrated by well-intentioned people, including friends (Sue, 2010). In terms of their negative consequences, microaggressions can have a cumulative effect that undermine one's well-being, which has been described as "death by a thousand cuts" (Nadal et al., 2011).

Beginning with theoretical discussions of sexual orientation microaggressions (Sue & Capodilupo, 2008) and, later, both sexual orientation and gender identity (Nadal et al., 2010), empirical attention to 2SLGBTQ+ microaggressions has grown, including on campuses. Both qualitative (Alessi et al., 2017; Dimberg et al., 2021; Platt & Lenzen, 2013) and quantitative (Maji & Sarika, 2024; Wilson-Yang et al., 2025; Woodford et al., 2015; Woodford, Weber, et al., 2018) studies with 2SLGBTQ+ post-secondary students conclude that microaggressions can negatively affect students' psychological well-being, often citing minority stress theory as an explanatory framework (discussed below). For instance, in a qualitative focus group study conducted at a Canadian institution, four themes

were identified reflecting the microaggressions queer undergraduate women experience. One theme was experiencing vulnerability, including at the systemic level (e.g., counselling staff's lack of sensitivity and cultural competence), which a participant described as threatening queer women's psychological and physical well-being (Dimberg et al., 2021). Also in Canada, Burczycka (2020) used a quantitative survey consisting of six microaggressive-like items (e.g., "suggestions that a man [woman] does not act like a man [woman] is supposed to act," p. 3) to examine discrimination based on sexual orientation and gender identity and expression, and found that significantly more LGBQ and TGD students experienced discrimination than their heterosexual and cisgender peers, respectively. Burczycka (2020) also examined students' reported impacts of discrimination, finding more LGBQ students endorsed negative emotional (e.g., "annoyed"), mental health (e.g., "experiencing lowered self-esteem"), and academic (e.g., "drop a class or classes") consequences than heterosexual students, with academic consequences being the least commonly endorsed by both groups (comparisons by TGD/cisgender were not provided). Though insightful, these results are limited by Burchzcka's (2020) use of untested single-item measures that reflect general discrimination and not specifically 2SLGBTQ+ microaggressive behaviours, potential inconsistent interpretation of items (e.g., mistreated and excluded in "someone being insulted, mistreated, ignored, or excluded because they are, or assumed to be, transgender," p. 3) by participants, and students' subjective reporting of effects vs. examining the association between experiences and outcomes using multi-item measures. However, an earlier refereed report utilizing the dataset used for the current analysis found that trans microaggressions (assessed with a tested multi-item microaggression scale; Woodford, Chonody, et al., 2018) were associated with poorer mental health and lower sense of belonging on campus among TGD students (Wilson-Yang et al., 2025).

Academic Outcomes

Academic satisfaction is a driver of students' motivation, success, confidence, career adaptability, and overall well-being, whereas school avoidance behaviours, ranging from being late for class to skipping class or quitting school, have the opposite effect (Howard et al., 2021; Olortegui Alcalde et al., 2025). Despite the importance of academic engagement and success for students, literature on the academic effects of 2SLGBTQ+ microaggressions is "somewhat sparse" (Maji & Sarika, 2024, p. 132). Other research indicates that campus climate, both perceptions of (Garvey et al., 2018; Yost & Gilmore, 2011) and experiences of (Woodford & Kulick, 2015; Yost & Gilmore, 2011), can impact 2SLGBTQ+ students' sense of belonging and their academics, with studies tending to engage only LGBQ students (exception: Woodford et al., 2017). The little research that exists concludes that 2SLGBTQ+ microaggressions matter for students' academics.

One U.S. study found that, among LGBQ students, hearing "that's so gay" and "no homo" each was associated with greater academic stress, and, for "no homo" only, lower GPA (Mathies et al., 2019). In another U.S. study exploring environmental microaggressions with TGD students, the more often students had to use restrooms in which they felt uncomfortable (i.e., not inclusive), the greater their academic stress. Likewise, encountering institutional forms that assessed gender/sex with only "male" and "female" options was more frequently associated with more academic stress and lower academic and intellectual development (Woodford et al., 2017). To our knowledge, in Canada, no research other than Burczycka's (2020) study—though with the issues outlined above—has considered the academic outcomes of 2SLGBTQ+ discrimination. More research is needed to understand the academic impacts of 2SLGBTQ+ microaggressions, both in Canada and beyond.

Well-Being and Academic Engagement and Development

Studies emphasize how fostering students' psychological well-being should be prioritized to foster their academic success (Marmolejo et al., 2024), as it can help them cope with stressors, including academic ones (Menkor et al., 2021). In one large-scale U.S. study, psychological distress was negatively associated with GPA (Marmolejo et al., 2024). In a systematic review and meta-analysis, student engagement was correlated with subjective well-being (Wong et al., 2024). A pivotal study engaging 2SLGBTQ+ secondary students in the United States found that school victimization was associated with negative academic outcomes, both directly and indirectly, through lower well-being (Kosciw et al., 2015). These studies, especially Kosciw et al. (2015), direct us to explore the role of psychological well-being on academic outcomes, including as a mediator of the microaggressions–academic outcomes relationship.

Conceptual Model

Centring the role of campus climate on 2SLGBTQ+ students' outcomes, including psychological well-being and academic success, we draw on a multifaceted model developed by Woodford et al. (2016) that is useful in understanding the complexities of 2SLGBTQ+ students' experiences and their development. This model holds that 2SLGBTQ+ students are marginalized, and thus face stressors due to cisgenderism and heterosexism, which on campuses are manifested through a hostile climate that includes microaggressions. Along with supporting research, the model draws on several key theories/models, including Astin's (1977) inputs-environments-outcomes persistence framework to student development, Tinto's institutional departure (Tinto, 1993), and minority stress theory (Hendricks & Testa, 2012; Meyer, 2003), with the latter being particularly influential. It maintains that while students' inputs (e.g., demographics; pre-university experiences, such as transphobic/homophobic bullying; individual strengths and assets) shape their well-being, academic, and 2SLGBTQ+ (e.g., pride) outcomes, with persistence being further shaped by students' engagement in academic courses, co-curricular activities, and informal relationships and connections with faculty, staff, and other students (Tinto, 1993), students' outcomes and engagement are mediated by campus climate. Minority stress theory posits that minority stressors (e.g., anti-2SLGBTQ+ discrimination) can create chronic stress, which can threaten one's well-being (Hendricks & Testa, 2012; Meyer, 2003). This theory has also been extended to academic outcomes, including school avoidance, GPA, institutional satisfaction, and acceptance on campus among LGBQ students (Woodford & Kulick, 2015) and GPA, academic and intellectual development, and academic stress among TGD students (Woodford et al., 2017). This theory holds that the chronic stress associated with exposure to anti-2SLGBTQ+ discrimination supplements the general stressors all students face (Hendricks & Testa, 2012; Meyer, 2003). Finally, the model also highlights the connection between students' well-being and their academic engagement and development. Thus, in sum, for 2SLGBTQ+ students, while inputs into their university experience shape their academics and well-being, they are influenced by campus climate and well-being, which also shapes their social and academic engagement.

STUDY PURPOSE, AND RESEARCHER POSITIONALITY AND EPISTEMOLOGY

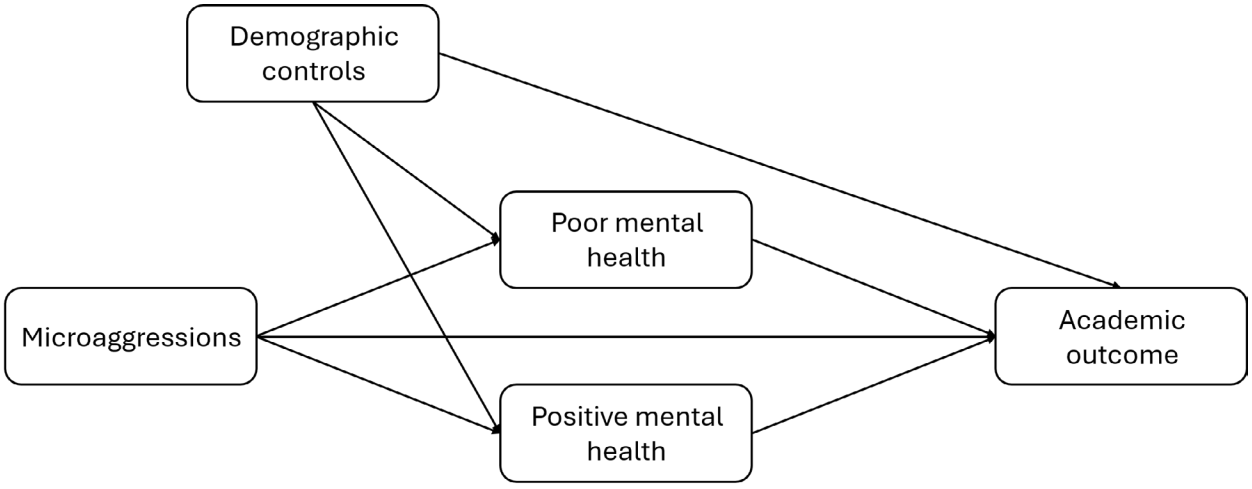
In this study with 2SLGBTQ+ students, we explored the relationship between trans/LGBQ microaggressions and students' psychological well-being (i.e., psychological distress, positive mental health) and academic outcomes (i.e., academic engagement, academic satisfaction), and the possible mediating effect of psychological well-being (see Figure 1). As discussed, we performed separate analyses for trans and LGBQ microaggressions.

We approach this study as 2SLGBTQ+ scholars, including individuals with recent experience as graduate students and student affairs

leaders, and one who is a well-established climate scholar. We identify as sexual minorities, with one individual identifying as genderfluid and the remainder as cisgender. One of us identifies as racialized, several of us live with hidden disabilities, and all of us are first-generation university students. These positionalities and related experiences of marginalization helped to foster trustworthiness with advisory committee members (see below) and promoted our insights into the cultural context and potential implications of our findings.

Aligned with principles of critical quantitative (Stage & Wells, 2014) and quantqueer quantitative (Strunk, 2024) research, we see research as a political non-neutral project and thus are committed to conducting socially just research. Hence, through this study, we ultimately aim to advance equity and inclusion on campuses. By examining trans/LGBQ microaggressions as expressions of cisgenderism/heterosexism, consistent with these stances, we document inequities 2SLGBTQ+ students experience and how these affect student outcomes. Intentionally, given the importance assigned to student well-being and success (performance, persistence) in higher education in Ontario (and elsewhere), we not only explore inequity but also examine its implications for students' psychological well-being and academics. We acknowledge the tensions between critical and queer critical frameworks and quantitative methods (see Strunk, 2024), such as the problematic nature of identity categories. Like other scholars (e.g., Garvey, 2019), we see these identities as fluid, thus students' reported identities reflect their momentary identification. Pivotal to our engagement with critical quantitative approaches, we purposefully used measures for sexuality, gender, and microaggressions that were developed in partnership with 2SLGBTQ+ students. Especially important is that these measures, including the number and diversity of identities included in the sexuality and gender measures, reflect the lived experiences of 2SLGBTQ+ students. Finally, we embrace reflexivity throughout the research process, starting with conceptualizing the original study and survey, through to our interpretation and writing of this manuscript.

Figure 1
Hypothesized Multilevel Moderated Parallel Mediation Model



Note. Microaggressions = Gender- or sexuality-based microaggressions, tested separately. Academic outcome = school avoidance or academic satisfaction, tested separately. Demographic controls = race, disability, and gender (in LGBQ microaggressions model only). Models are nested within university.

METHOD

Participants

Our sample includes 3,344 self-identified 2SLGBTQ+ students recruited from Ontario universities. Participants had a mean age of 21.9 years (*SD* = 4.42, range: 18–67 years) and comprised 28.20% TGD students, 49.70% who reported a racialized ethno-racial background, 69.50% who reported 1+ disabilities, 83.50% undergraduates, and 94.10% full-time students. Among TGD students, the largest group identified as genderqueer (18.30%). Across all students, bisexual was the largest sexuality group (36.0%). See Table 1 for detailed sample demographics.

Table 1
Sample Demographics (N = 3,344)

Demographic	n	%	Demographic	n	%
Sexuality			**Gender**		
Asexual	216	6.46	Agender	51	1.53
Bisexual	1,205	36.03	Demigender	16	0.48
Gay	564	16.87	Genderqueer	46	1.38
Demisexual	55	1.64	Gender non-conforming	31	0.93
Heterosexual	29	0.87	Genderfluid	53	1.58
Lesbian	388	11.60	Man (coded cisgender)	612	18.30
Man-loving man	17	0.51	Man (coded trans)	25	0.75
Pansexual	337	10.08	Man [a]	53	1.58
Queer	403	12.05	Man (sex not specified)	1	0.03
Questioning	55	1.64	Non-binary	173	5.17
Two-spirit	8	0.24	Pangender	5	0.15
Woman-loving woman	34	1.02	Queer	66	1.97
Diverse sexualities	24	0.72	Questioning	50	1.50
Prefer not to answer	2	0.06	Trans	16	0.48
Reject labels	7	0.21	Trans feminine	11	0.33
Residence			Transgender	14	0.42
On-campus uni residence	552	16.51	Trans masculine	37	1.11
Off-campus uni residence	135	4.04	Trans man	61	1.82
Off-campus, private landlord	1,743	52.12	Trans woman	30	0.90
Home with parents/guardians	762	22.79	Two-spirit	10	0.30
Own house/condo	131	3.92	Woman (coded cisgender)	1,777	53.14
Other	20	0.60	Woman (coded trans)	12	0.36
Missing	1	0.03	Woman [a]	166	4.96
			Woman (sex not specified)	1	0.03
			Diverse genders	16	0.48
			Prefer not to answer	10	0.30
			Missing	1	0.03

Demographic	n	%	Demographic	n	%
Race/Ethnocultural Background			**Faculty/Area of study**		
Black African	26	0.78	Arts and humanities	604	18.06
Black North American	5	0.15	Biological and life sciences	419	12.53
Black Caribbean	18	0.54	Business	146	4.37
East Asian	225	6.73	Education	107	3.20
Indigenous	17	0.51	Engineering	244	7.30
Indo-Caribbean	13	0.39	Fine arts	122	3.65
Latin American	49	1.47	Health/Helping professions	384	11.48
Middle Eastern	60	1.79	Math and computer science	198	5.92
North African	7	0.21	Music and performing arts	67	2.00
Oceania	1	0.03	Physical science	142	4.25
South Asian	121	3.62	Social science	774	23.15
Southeast Asian	94	2.81	Medicine	8	0.24
White North American	911	27.24	Combined faculties	54	1.61
White European	739	22.10	Other (please specify)	87	2.60
Multiracial	999	29.87	Prefer not to answer	25	0.75
Diverse backgrounds	26	0.78	Missing	2	0.06
Prefer not to say	23	0.69			
Missing	10	0.30			
Disability/Condition					
Physical	237	7.09			
Learning-related	236	7.06			
Cognitive	489	14.62			
Emotional/Mental health	2,196	65.67			
Other	148	4.43			

Note. Percentages are calculated including missing data. Participants were able to select multiple disabilities. Counts reflect the number of participants selecting each disability category. Uni = university.

[a] These participants initially selected multiple genders, flagging them as gender diverse. When asked to choose one gender identity for our analyses, they selected the gender identity that aligned with the sex they were assigned at birth (i.e., “man” and “male”; “woman” and “female”).

Procedures

The survey was part of a 2SLGBTQ+ campus climate study, *Thriving On Campus*, conducted in partnership with 21 public universities in Ontario (total *N* = 491,613).[v] An advisory committee, including representatives from 2SLGBTQ+ and student advocacy organizations and the student services field, guided the study, including developing the participant recruitment strategy. The survey was conducted in winter of 2019 and was available in English and French (professionally translated). A convenience sample of 2SLGBTQ+ students was recruited via campus outreach and social media. To join the study, participants had to identify as belonging to the 2SLGBTQ+ community and be a current student at one of the 21 universities. Participants were invited to enter a draw to win an e-gift card (100 e-gift cards available, with values ranging from $20 to $200). Research ethics approval was received from 19 universities, and two other universities approved the survey's distribution without requiring ethics approval. A list of support services, including ones for racialized and Indigenous students, was provided with the survey in case a student needed support. Before launching the survey, feedback was obtained from 2SLGBTQ+ research assistants and students (*n* = 8). The survey was conducted using Qualtrics and included attention-check and other quality-control questions.

Measures

Mean scores were calculated for multi-item measures, and each was coded so that scores indicate more of the construct being assessed. For each of these measures, we used existing scales with evidence that they validly measure their respective construct for purposes like ours, and whose scores demonstrated strong internal consistency in earlier studies. School avoidance is an exception, having demonstrated acceptable internal consistency in earlier studies (α = .72, Woodford et al., 2015). We report Cronbach's alphas below as evidence of internal consistency with the current sample.

Consistent with our guiding values, we used sexuality, gender, and microaggressions measures that were developed in consultation with 2SLGBTQ+ students. For sexuality and gender measures, focus group results strengthened the proposed measures, which were then evaluated via an online survey examining their perceived inclusiveness of diverse sexualities/gender identities (Woodford et al., 2023). Likewise, for our microaggressions scales, focus groups were conducted with 2SLGBTQ+ students to foster face and content validity, promoting clarity, accuracy, comprehensiveness, and, most relevant, reflecting students' experiences (Woodford et al., 2015; Woodford, Chonody, et al., 2018).

Sexuality

Participants selected all identities from 14 options (including write-in and *Prefer not to answer*) that described their sexuality. Those who selected multiple identities (*n* = 1,618) received a follow-up question noting the difficulties of including all unique combinations of identities in statistical analyses when multiple identities are chosen and asking them to select one identity (from those initially selected) that best represented their sexuality.

Gender and Sex

Gender was similarly measured, with participants first selecting all identities from 20 options (including write-in and *Prefer not to answer*) that described their gender, and then—if they selected multiple identities (*n* = 754)—reporting the identity that best represented their gender. Sex assigned at birth (*Female*, *Male*, *Prefer not to answer*) and being born intersex were assessed separately. For our analyses, we created a binary indicator of gender by classifying students who selected *Female* or *Male* as their sex and respectively chose only *Woman* or *Man* as their gender as *cisgender* and the remaining students as *trans and gender-diverse* (*TGD*).

Ethno/Racial Background

Participants selected all options from 17 ethno/racial backgrounds (including *Don't know*, write-in, and *Prefer not to answer*) that best described them. If participants selected *Indigenous*, they were prompted to complete a follow-up question to indicate how they self-identified (i.e., *First Nation [Status/Non-Status]*, *Métis*, *Inuk [Inuit]*, write-in, *Prefer not to answer*). We classified participants who selected multiple ethno/racial backgrounds as *Multiracial* (*n* = 988). For our analyses, we created a binary indicator of participants reporting racialized or white ethno/racial backgrounds.

Disability

Participants self-reported whether they had any conditions or disabilities that significantly affected their experiences as university students. Specifically, they indicated whether they had a physical, learning, neurodevelopmental/cognitive, emotional/mental health, or other (write-in) disability or condition. Examples were given for each of the first four disabilities. We created a binary indicator of participants who reported no disabilities or 1+ disabilities.

Trans and LGBQ Microaggressions

We measured trans and LGBQ microaggressions using the 25-item Trans Microaggressions on Campus Scale (Woodford, Chonody, et al., 2018) and the 20-item LGBQ Microaggressions on Campus Scale (Woodford et al., 2015), respectively. Using a 6-point Likert response scale for both measures (0 = *Never*, *5 = Very frequently*), students indicated how often they encountered gender minority–based/sexual orientation–based microaggressions on campus in the past year. Each scale includes two subscales addressing interpersonal (e.g., trans: "A friend or acquaintance made transphobic comments without realizing they were offensive"; LGBQ: "Others said LGBQ people shouldn't be around children") and environmental (e.g., trans: "My school/college made an effort to support LGBQ students, but not trans students"; LGBQ: "I received information about sexual health that was limited to just heterosexual sex") microaggressions. In our analyses, we used the full scales rather than separate subscales. Each scale demonstrated excellent internal consistency (trans α = .94; LGBQ α = .93).

Psychological Distress

Psychological distress was measured using the 4-item Patient Health Questionnaire-4 (PHQ-4; Kroenke et al., 2009). The measure assesses the frequency of experiencing anxiety and depression systems, two common and often coexisting disorders, over the last two weeks (0 = *Not at all*, *3 = Nearly every day*; sample item: "Feeling nervous, anxious or on edge"). Internal consistency was good among our sample (α = .86).

Positive Mental Health

Participants completed Lamers et al.'s (2011) 14-item Mental Health Continuum Short Form by selecting from six options (0 = *Never*, *5 = Every day*) to report how often they experienced symptoms of emotional, psychological, and social well-being in the past month (sample item: "Interested in life.") Internal consistency was excellent among our sample (α = .92).

Academic Satisfaction

We used the 4-item Academic Satisfaction subscale from the Revised College Student Subjective Wellbeing Questionnaire to assess students' satisfaction at their university and in their classes (Renshaw, 2018). Using a 7-point Likert scale (-3 = *Strongly disagree*, 3 = *Strongly agree*), students indicated their level of agreement with each item (sample item: "I am happy how I have done in my classes"). Internal consistency was good among our sample (α = .89).

School Avoidance

We assessed school avoidance using Ramos's (2000) 8-item scale evaluating the frequency of students' disengagement from academic activities during the past semester. Students selected

from five options (0 = *Never*, 4 = *Very often*; sample item: "Made excuses to get out of class"). Internal consistency was acceptable among our sample (α = .73)

Data Analyses

We used R Statistical Software (v4.3.2; R Core Team, 2023) and the the lme4 package (v1.1.37; Bates et al., 2015) to analyze our data. To account for students being nested within universities, we conducted mixed-effects, parallel mediation models with random intercepts. Models are nested within university. We controlled for race, disability, and gender (LGBQ model only). Before analysis, we effects-coded disability (-1 = *No disabilities reported*, 1 = *1+ disabilities reported*), race (-1 = *white*, 1 = *racialized*), and gender (-1 = c*isgender*, 1 = *TGD*), and mean-centred all continuous predictors at the cluster (i.e., university) level. We estimated indirect effects using a non-parametric cluster-level bootstrapping procedure, with 1,000 resamples of entire clusters with replacement at each iteration, controlling for relevant covariates. Empirical (percentile-based) 95% confidence intervals were derived from the bootstrapped distribution of estimates.

RESULTS

In addition to sample demographics, Table 1 provides descriptive information about our primary variables. Results for the mediation analysis are presented across Figures 2 and 3 and Tables 2 and 3.

Trans Microaggressions

Direct Effects

As seen in Figure 2 and Table 2, among TGD students, the frequency of experiencing trans microaggressions was associated with decreased academic satisfaction and increased school avoidance. Likewise, microaggressions were associated with increased psychological distress and decreased positive mental health. Both mental health indicators were associated with both academic outcomes. Psychological distress was associated with decreased academic satisfaction and increased school avoidance, with converse relationships found for positive mental health. As seen in Figure 2, standardized betas were small, with the positive mental health–academic satisfaction relationship being the largest at 0.35. These patterns of associations are also displayed in Table 2. In terms of controls (see Table 2), a similar pattern of associations was seen for students who reported a racialized (vs. white) ethno/racial background, except for psychological distress. That is, racialized students reported lower positive mental and academic satisfaction, and greater school avoidance, than white students. Students who reported 1+ disabilities, except for academic satisfaction, reported poorer outcomes than students without a disability. Reporting 1+ (vs. 0) disabilities was the strongest predictor of psychological distress and positive mental health, while positive mental health predicted academic satisfaction most strongly and psychological distress predicted school avoidance most strongly.

Indirect Effects

As seen in Table 3, trans microaggressions had a significant indirect association with academic satisfaction through both positive mental health and psychological distress. These indirect effects did not differ significantly in size. In contrast, an indirect association between trans microaggressions and school avoidance emerged significantly for only psychological distress. For both outcomes, however, the direct (vs. indirect) association accounted for the majority of the relationship between trans microaggressions and the outcome.

LGBQ Microaggressions

Direct Effects

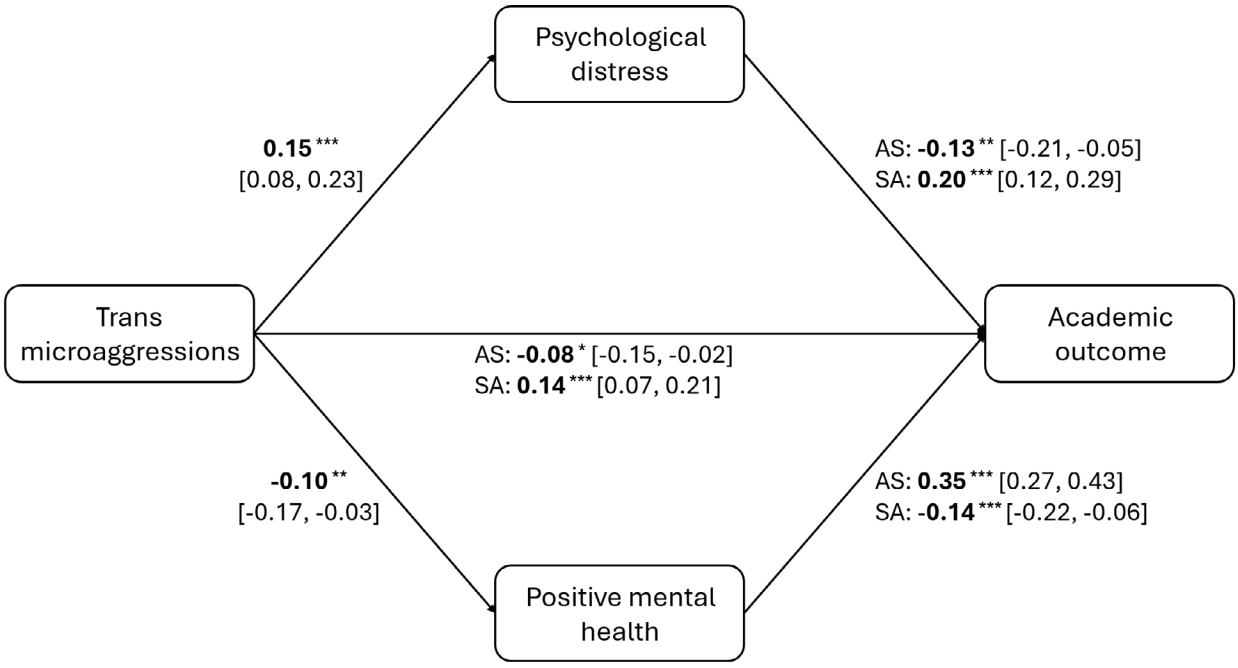
Table 2 and Figure 3 illustrate that the frequency of experiencing LGBQ microaggressions was associated with increased school avoidance and lower academic satisfaction, as well as increased distress and decreased positive mental

health. Psychological distress was associated with lower academic satisfaction and greater school avoidance, whereas the converse relationships were found for positive mental health. Standardized betas were small, with the positive mental health–academic satisfaction relationship being the largest at 0.36. Also, among control variables (see Table 2), racialized students reported less positive mental health and academic satisfaction and more school avoidance compared to white students. Students who reported 1+ (vs. 0) disabilities reported poorer outcomes across all the mental health and academic variables. Reporting a trans and gender-diverse (vs. cisgender) identity was significantly associated only with less positive mental health. Positive mental health was most strongly associated with academic satisfaction, while psychological distress was descriptively most strongly associated with school avoidance.

Indirect Effects

As seen in Table 3, LGBQ microaggressions were significantly indirectly associated with academic satisfaction via psychological distress and positive mental health. The indirect association via positive mental health was significantly larger than through psychological distress. In addition, LGBQ microaggressions were also significantly indirectly associated with school avoidance through psychological distress and positive mental health.

Figure 2
Academic Outcomes Multilevel Parallel Mediation Model with TGD Students

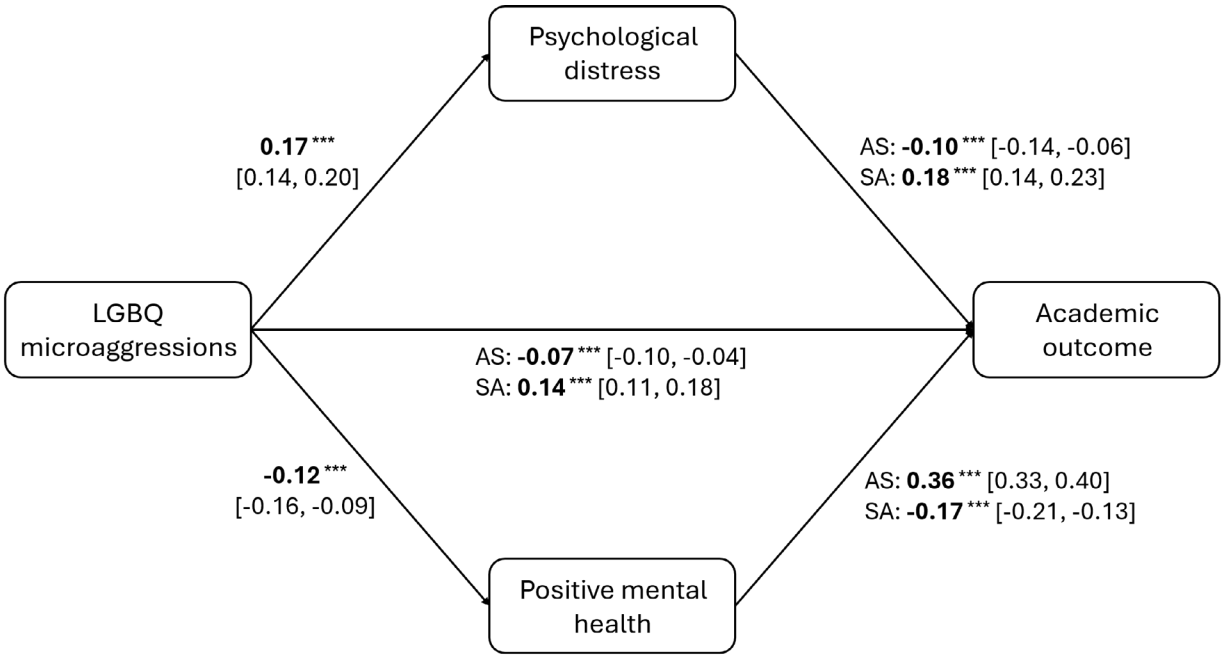


Note. AS: *N* = 700; SA: *N* = 699. TGD = trans and gender-diverse; AS = academic satisfaction; SA = school avoidance. Coefficients are standardized betas with 95% CIs. Model controls for race and disability.

** $p < .01$.

*** $p < .001$.

Figure 3
Academic Outcomes Multilevel Parallel Mediation Model with LGBQ Students



Note. AS: *N* = 3,060; SA: *N* = 3,057. LGBQ = lesbian, gay, bisexual, queer; AS = academic satisfaction; SA = school avoidance. Coefficients are standardized betas with 95% CIs. Model controls for race, disability, and gender.

*** $p < .001$.

Table 2
Multilevel Parallel Mediation Model Results by Sample

		Psychological distress		Positive mental health		Academic satisfaction		School avoidance	
Sample	Predictor	*b* (*SE*)	R_p^2	*b* (*SE*)	R_p^2	*b* (*SE*)	R_p^2	*b* (*SE*)	R_p^2
TGD	Psychological distress	—	—	—	—	-0.23** (0.08)	.01	0.16*** (0.03)	.03
	Positive mental health	—	—	—	—	0.57*** (0.07)	.08	-0.09** (0.03)	.01
	Trans microaggressions	0.13*** (0.03)	.02	-0.10** (0.04)	.01	-0.12* (0.05)	.01	0.09*** (0.02)	.02
	Race	0.03 (0.03)	.002	-0.13*** (0.04)	.02	-0.14** (0.05)	.01	0.08*** (0.02)	.01
	Disability	0.32*** (0.04)	.08	-0.28*** (0.05)	.05	-0.08 (0.07)	.004	0.07* (0.03)	.01
	Model R²	.13		.08		.24		.17	
LGBQ	Psychological distress	—	—	—	—	-0.16*** (0.03)	.02	0.13*** (0.01)	.03
	Positive mental health	—	—	—	—	0.53*** (0.03)	.10	-0.10*** (0.01)	.02
	LGBQ microaggressions	0.16*** (0.02)	.03	-0.13*** (0.02)	.02	-0.11*** (0.02)	.02	0.09*** (0.01)	.02
	Race	0.03 (0.01)	.004	-0.11*** (0.02)	.01	-0.11*** (0.02)	.02	0.04*** (0.01)	.01
	Gender	0.01 (0.02)	.004	-0.10*** (0.02)	.01	-0.01 (0.03)	.02	0.001 (0.01)	.005
	Disability	0.35*** (0.02)	.14	-0.27*** (0.02)	.06	-0.08** (0.03)	.02	0.04*** (0.01)	.01
	Model R²	.20		.12		.25		.17	

Note. Psychological distress and positive mental health: N_{TGD} = 699, N_{LGBQ} = 3,060; Academic satisfaction: N_{TGD} = 700, N_{LGBQ} = 3,060; School avoidance: N_{TGD} = 699, N_{LGBQ} = 3,057. Continuous predictors were mean-centred within university and binary covariates were effects-coded (-1 = *white*, *cisgender*, *able-bodied,* 1 = *racialized*, *TGD*, *1+ disabilities*, respectively). TGD = trans and gender-diverse; LGBQ = lesbian, gay, bisexual, queer. Coefficients are unstandardized betas.

*$p < .05$.

**$p < .01$.

***$p < .001$.

Table 3
Indirect Effects for Parallel Mediation Models

Sample	Outcome	Effect	*b* (*SE*)	95% CI
TGD	Academic satisfaction	Total effect	**-0.21 (0.06)**	[-0.32, -0.10]
		Total indirect	**-0.09 (0.03)**	[-0.14, -0.04]
		Indirect (PD)	**-0.03 (0.01)**	[-0.06, -0.01]
		Indirect (PMH)	**-0.06 (0.02)**	[-0.10, -0.02]
		Difference	0.02 (0.02)	[-0.02, 0.07]
	School avoidance	Total effect	**0.12 (0.02)**	[0.08, 0.17]
		Total indirect	**0.03 (0.01)**	[0.01, 0.05]
		Indirect (PD)	**0.02 (0.01)**	[0.01, 0.04]
		Indirect (PMH)	0.01 (0.00)	[0.00, 0.02]
		Difference	0.01 (0.01)	[0.00, 0.03]
LGBQ	Academic satisfaction	Total effect	**-0.20 (0.03)**	[-0.25, -0.15]
		Total indirect	**-0.09 (0.01)**	[-0.12, -0.07]
		Indirect (PD)	**-0.02 (0.01)**	[-0.04, -0.01]
		Indirect (PMH)	**-0.07 (0.01)**	[-0.09, -0.05]
		Difference	**0.04 (0.01)**	[0.02, 0.07]
	School avoidance	Total effect	**0.12 (0.01)**	[0.10, 0.15]
		Total indirect	**0.03 (0.00)**	[0.03, 0.04]
		Indirect (PD)	**0.02 (0.00)**	[0.01, 0.03]
		Indirect (PMH)	**0.01 (0.00)**	[0.01, 0.02]
		Difference	0.01 (0.00)	[0.00, 0.01]

Note. Confidence intervals that do not include 0 are considered significant at the conventional level of $p < .05$. Significant effects are bolded. Total effects are the sum of the direct and total indirect effects of a predictor on the outcome. Total indirect effects are the sum of the indirect effects via psychological distress and positive mental health. "Difference" tests whether the two indirect effects differ significantly in size. TGD = trans and gender-diverse; PD = psychological distress; PMH = positive mental health; LGBQ = lesbian, gay, bisexual, queer. Coefficients are unstandardized betas.

DISCUSSION

Given this is the first large-scale study to explore trans/LGBQ microaggressions on university campuses and their association with academic outcomes among 2SLGBTQ+ students, it makes important contributions to research, policy, and practice, and, hopefully, equity-driven change on campuses. Universities exist to promote students' academic development and achievement, and our results indicate that 2SLGBTQ+ microaggressions matter for students' academics, as well as their well-being, which also shapes their academics (e.g., Howard et al., 2021). Students who are satisfied with their academics experience many positive outcomes, ranging from motivation to academic success, while skipping classes and other school disengagement behaviours threaten their development and achievements. Given the importance of academic satisfaction and student engagement, and gaps in the literature concerning the role of microaggressions on students' academic outcomes—both generally and in Canada—we set out to close these gaps, including exploring the relationship between students' psychological well-being on the microaggression–academic outcomes relationship.

Most importantly, our results indicate that trans and LGBQ microaggressions matter for students' academic outcomes. Specifically, we found that TGD and LGBQ students who reported more frequently encountering trans and LGBQ microaggressions on campus, respectively, also reported lower academic satisfaction and more frequent school avoidance behaviours. Equally important, in our mediation analysis, we found that microaggressions were indirectly associated with both academic outcomes through psychological well-being for both groups, except for positive mental health and school avoidance among TGD students. Even with this exception, these findings highlight the interconnected nature of campus climate (via microaggressions), well-being, and academic development and engagement. Finally, for each group, we found microaggressions to be associated with greater distress and lower positive mental health.

These findings reinforce the need to address 2SLGBTQ+ microaggressions—both in terms of prevention and supporting targeted students—in fostering student engagement and success. Below, we discuss our key findings related to academic outcomes. Though we examined the main effects of microaggressions on psychological well-being, given the limited space and our focus on academic outcomes, we do not discuss findings related to these direct effects. Finally, though included as controls, we briefly discuss findings related to race and disability on students' academic outcomes in the spirit of advancing intersectional service provision on campuses.

Trans/LGBQ Microaggressions and Academic Outcomes

Our findings indicate that experiencing microaggressions can affect students' academic outcomes. Specifically, we found that trans and LGBQ microaggressions were similarly and directly associated with lower academic satisfaction and greater school avoidance (Figures 2 and 3, Table 2). These results align with previous research examining intersections between microaggressions (Mathies et al., 2019; Woodford & Kulick, 2015; Woodford et al., 2017) or victimization (Yost & Gilmore, 2011) on students' academics. Importantly, our study is the first to both address academic outcomes and to conduct a parallel analysis engaging both TGD and LGBQ students.

Though often subtle in nature, microaggressions are commonplace, occurring more frequently than blatant discrimination (Woodford, Weber, et al., 2018), and involve a stress reaction that can accumulate over time; they can eventually undermine 2SLGBTQ+ students' engagement and satisfaction, as our findings suggest. As microaggression theory and research suggests, microaggressions can have a cumulative stress reaction, as captured by the analogy "death by a thousand cuts" (Nadal et al., 2011). Though often subtle in nature, the power of microaggressions is likely conveyed through their frequency and underlying message of hostility and exclusion. And, as minority stress

theory posits (Hendricks & Testa, 2012; Meyer, 2003), 2SLGBTQ+ discrimination, manifested through microaggressions, contributes to the chronic psychological stress that 2SLGBTQ+ students experience given their minority status on campuses and generally, which can put them at increased risk for negative outcomes, including academic ones, as we show. Further, other research indicates that microaggressions can contribute to increased academic stress among TGD students (Woodford et al., 2017) and sexual minority students (Mathies et al., 2019), and it is likely that academic stress is linked to low levels of satisfaction and school avoidance behaviours.

Trans/LGBQ Microaggressions and Academic Outcomes: Mediated by Psychological Well-Being

In expanding research examining 2SLGBTQ+ microaggressions on campus, we also explored the psychological effects of microaggressions on students' academic satisfaction and school avoidance. As seen in Table 3, mediation results indicate that trans/LGBQ microaggressions' association with increased distress, in turn, was associated with decreased academic satisfaction and increased school avoidance for both TGD and LGBQ groups. Concerning positive mental health, our findings indicate that a mediated relationship exists for academic satisfaction for both groups but only exists for school avoidance for LGBQ students.

Except for positive mental health and school avoidance among TGD students, our results are corroborated by Kosciw et al.'s (2015) research with 2SLGBTQ+ secondary students. Though research is needed to examine why positive mental health was not a significant mediator of microaggressions–school avoidance for TGD students, we offer a possible explanation. One, qualitative differences between psychological distress and positive mental health might mean these two constructs perform differently for this pathway. Distress captures psychological difficulties (recall that PHQ-4 assesses the frequency of anxiety and depression symptoms), whereas positive mental health assesses well-being, strengths, and flourishing. Possibly, high levels of distress related to microaggressions can lead to tardiness, skipping class, and other avoidance behaviours, maybe because of isolation and other negative behaviours and feelings common to distress for both groups. Conversely, while positive mental health can be impacted by microaggressions, positive well-being and strengths might promote resilience against the stressors of LGBQ microaggressions, though it might not do the same for trans microaggressions. In considering this proposition, it is important to note that, while the sample examining LGBQ microaggressions included TGD students, the majority were cisgender. The sample for the trans microaggressions analysis consisted of only TGD students. For TGD students, considering the structural barriers and discrimination they face on campus, any resilience-promoting potential of positive mental health on school avoidance is lost. Again, future research is needed to explore these and other propositions.

Demographic Controls

In the spirit of informing future intersectional analysis with diverse 2SLGBTQ+ students and intersectional services (Duran et al., 2020), we turn to demographic findings concerning academic outcomes. Among both TGD and 2SLGBTQ+ students, we found racialized and students who identified as having 1+ disability reported poorer outcomes, except for disability and academic satisfaction for TGD students. It is possible that significant differences emerged because of the additional challenges and discrimination racialized or disabled students face related to racism (Arayata et al., 2022; Barrita et al., 2023; Duran, 2018) and ableism (Kimball et al., 2018; Krakoff et al., 2022; Miller et al., 2022), respectively. Racialized 2SLGBTQ+ students encounter intersectional microaggressions, such as being threatened because they are racialized and part of the 2SLGBTQ+ community, and such microaggressions are associated with lower school persistence (Barrita et al., 2023). Similarly, disabled 2SLGBTQ+ students report facing microaggressions, such as being assumed

to be incompetent or having their experiences dismissed (Miller et al., 2022), which can threaten their sense of belonging, well-being, and academic engagement (Krakoff et al., 2022; Miller et al., 2021, 2022). Across these groups (and others), 2SLGBTQ+ students with intersecting positionalities navigate multiple, overlapping systems of oppression, which can shape their experiences and outcomes (Duran et al., 2020).

Limitations and Future Research

Methodologically, our study has many strengths (e.g., large sample drawn from multiple institutions, significant inclusion of TGD and racialized students). Still, the findings should be considered within the study's limitations. Given its cross-sectional design, we cannot determine causation, though our findings are supported by theory and research.

The survey was conducted prior to the COVID-19 pandemic; thus, students' experiences and outcomes might differ today, especially given the recent rise in anti-2SLGBTQ+ discourses and policies in Canada and abroad, possibly contributing to increased exclusion on campuses and beyond, creating increased minority stressors that can undermine students' well-being and academics. Expanding virtual learning and support spaces also may have changed how discrimination occurs and how students access care and support services. Together, these factors might have reshaped students' well-being and academic engagement in ways not captured by pre-pandemic data.

While some readers might consider the use of convenience sampling a limitation to generalizability, given the inability to draw a random sample of 2SLGBTQ+ students for such a study, we believe that the size, multi-institutional nature, and diversity of our sample mean our study's findings are useful to student service leaders and practitioners. We recommend that future research explore other academic outcomes (e.g., GPA), additional student positionalities (e.g., immigration status, first-generation), and protective factors (e.g., faculty support, students' academic self-efficacy, engagement in high-impact practices, academic advising).

Implications for Student Services

We offer implications to support 2SLGBTQ+ socially responsive student services from the lenses of policy and practice to foster inclusion and academic success for diverse 2SLGBTQ+ students. Given the role of trans/LGBQ microaggressions on students' academic and psychological outcomes, campuses need to strengthen campus climate initiatives by ensuring they include content on microaggressions, both their nature and consequences. In our experience, many climate initiatives tend to focus on definitions and present statistics on blatant discrimination but overlook subtle forms of discrimination. In addition to statistics, we recommend students' narratives be included, if possible. Also, we suggest that campuses offer training for potential bystanders and targets on how to respond when microaggressions occur. Finally, given the pervasiveness of microaggressions, which, as noted, is likely even greater today than when our study was conducted, and overt anti-2SLGBTQ+ laws and discourses in both Canada and the United States, it is particularly important to support 2SLGBTQ+ students' resilience and resistance. Resource centres and groups for 2SLGBTQ+ students are important here, as they can offer support and promote resilience and resistance. Likewise, mental health counselling can provide support and foster resilience. Counselling services—both mental health and academic—that take a holistic approach need to assess for the challenges 2SLGBTQ+ students face, including microaggressions, and take a socially responsive approach that affirms 2SLGBTQ+ students' identities and experiences.

Finally, given findings related to race and disability, we recommend that service providers take an intersectional approach by considering the whole self, rather than offering single-identity initiatives/services (e.g., 2SLGBTQ+ only, race only, disability only). Illustrations of effective intersectional initiatives exist, such as Oregon State University's Multicultural LGBTQ+ Support Network, which was developed to meet the needs of racialized 2SLGBTQ+ students (Nguyen & Konrad, 2024). A Canadian example

is Queen's University's Yellow House (see *Video 8* to learn more).

Student service leaders and practitioners and other campus stakeholders (e.g., faculty) who work with 2SLGBTQ+ students need to be supported to develop the competencies needed to provide responsive services. In addition to exploring microaggressions and other stressors, it is important to address students' strengths and resources. Staff providing academic support need to understand the role that psychological well-being plays on students' academic engagement and development and be able to effectively refer students requiring mental health support to wellness services. Training across the student services field that includes discussion of intersecting positionalities/experiences is needed. Integrating 2SLGBTQ+ training, including learning on intersectional approaches, into staff development plans and staff supervision and evaluation can support cultural transformation to support diverse 2SLGBTQ+ students and other students with marginalized positionalities.

CONCLUSION

Our results address research gaps and demonstrate some of the possible consequences of trans/LGBQ microaggressions on diverse 2SLGBTQ+ students' academics, both directly and indirectly through reduced psychological well-being. This is the first large-scale study to address microaggressions, academic outcomes, and the mediating role of well-being. Thus, it offers much-needed insights and implications for the field. We hope student services leaders, practitioners, and researchers will use our findings to inform their efforts to foster inclusion and equity for diverse 2SLGBTQ+ students.

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