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Disclosure, minority stress, and mental health among bisexual, pansexual, and queer (bi+) adults: The roles of primary sexual identity and multiple sexual identity label use

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Abstract

Bisexual people are at increased risk for anxiety and depression compared to heterosexual and gay/lesbian people, but little is known about people who use other labels to describe attractions to more than one gender (e.g., pansexual, queer; collectively "bi+"). In addition, some people use more than one label to describe their sexual orientation, but research has yet to examine whether using one versus multiple labels is associated with identity-related experiences or mental health. To address these gaps, we explored potential differences in disclosure, minority stress, and mental health among bi+ adults based on primary sexual identity and multiple label use. As part of a larger project, 669 bi+ adults completed an online survey. Primary sexual identities included bisexual (53.2%), pansexual (26.3%), and queer (20.5%), and 55.2% used multiple labels. Compared to bisexual participants, pansexual participants reported higher disclosure, discrimination from heterosexual people, and depression. Pansexual participants also reported higher anxiety and lower internalized binegativity, but these associations became non-significant after adjusting for demographics. Queer participants reported higher disclosure, discrimination from heterosexual people, and anxiety, but only the difference in disclosure remained significant in adjusting analyses. Finally, participants who used multiple labels reported higher disclosure and discrimination from heterosexual and gay/lesbian people, but only the difference in discrimination from gay/lesbian people remained significant in adjusted analyses. Findings highlight the heterogeneity of bi+ individuals and the importance of considering bisexual, pansexual, and queer individuals as unique groups as well as considering whether bi+ individuals use one or multiple sexual identity labels.

Keywords

bisexual; pansexual; queer; identity; depression; anxiety

Bisexual people are at increased risk for anxiety and depression compared to both heterosexual and gay/lesbian people (Ross et al., 2018; Salway et al., 2019). Consistent

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with minority stress theory (Brooks, 1981; Meyer, 2003), these disparities are hypothesized to be due to the unique stressors that bisexual people face, such as negative attitudes toward and stereotypes about them, and discrimination from both heterosexual and gay/lesbian people (Feinstein & Dyar, 2017). People who use other labels to describe attractions to more than one gender (e.g., pansexual, queer; collectively "bi+") are also at increased risk for anxiety and depression (Borgogna et al., 2019; Horwitz et al., 2020), but little is known about their unique experiences because few studies have examined them as separate groups. In addition, some people use more than one label to describe their sexual orientation, but research has yet to examine whether using multiple sexual identity labels is associated with identity-related experiences or mental health. To address these gaps, we explored potential differences in disclosure, minority stress, and mental health among bi+ adults based on primary sexual identity and multiple label use.

Differentiating among subgroups of bi+ individuals

Historically, bisexuality has been underrepresented in the social and medical sciences (Kaestle & Ivory, 2012; Monro et al., 2017). Research on sexual minority health has typically combined gay, lesbian, and bisexual people into a single group, and compared them to heterosexual people (see Kaestle & Ivory, 2012). Although this has led to important advances in our understanding of the health disparities affecting sexual minorities, it has also masked important differences between gay/lesbian and bisexual people. As researchers have started to examine gay/lesbian and bisexual people as separate groups, it has become clear that bisexual people are at increased risk for negative mental health outcomes compared to both heterosexual and gay/lesbian people (Ross et al., 2018; Salway et al., 2019). These findings have drawn attention to the need to examine the unique experiences of bisexual people.

Still, bisexual is one of several labels that can be used to describe attractions to more than one gender. Other labels, such as pansexual and queer, can also be used for this purpose, and are particularly common among young people (Goldberg et al., 2020; Greaves et al., 2019). cmen or attraction to more than one gender (Barker, 2014), pansexuality as attraction to all genders or attraction regardless of gender (Gonel, 2013), and queer as any non-heterosexual or non-cisgender identity (Kolker et al., 2020). According to minority stress theory (Brooks, 1981; Meyer, 2003), sexual minorities contend with a number of unique stigma-related stressors, including experiencing and anticipating discrimination, internalizing negative societal attitudes, and deciding whether to disclose or conceal their sexual orientation. All bi+ individuals, regardless of the label they use, may be exposed to prejudice and discrimination rooted in monosexism (the assumption that everyone is or should be attracted to only one gender; Eisner, 2016) and they may go on to internalize these monosexist assumptions. However, emerging evidence suggests that bi+ people's experiences may differ based on the label they use.

For example, despite evidence that many bisexual people describe their sexual orientation using nonbinary language (Flanders et al., 2017; Galupo et al., 2017), bisexual people may be accused of reinforcing the gender binary or being transphobic because of misconceptions about bisexuality. In addition, pansexual people experience unique challenges, such as

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people not knowing what pansexuality is, confusing it with polygamy, and accusing them of using the label to avoid the stigma associated with bisexuality (Belous & Bauman, 2017; Gonel, 2013). Finally, given the broad and non-specific nature of the label queer, people who identify as queer may be assumed to be gay or lesbian even if they are attracted to more than one gender. Furthermore, some members of LGBTQ+ communities oppose the use of the term queer because of its historical use as a slur (Panfil, 2020), which may lead to queer people experiencing pushback within LGBTQ+ communities.

Mental health among subgroups of bi+ individuals

Despite the potential for bi+ people's experiences to differ based on the label they use, few studies have explored this possibility. Borgogna and colleagues (2019) investigated differences in anxiety and depression among college students across eight sexual identity groups. They found that all of the sexual minority groups reported higher anxiety and depression than the heterosexual group. Among the bi+ groups, the differences were largest for pansexual, then queer, and then bisexual individuals. Horwitz and colleagues (2020) also explored differences in depression among college students across nine sexual identity groups. Again, all of the sexual minority groups were more likely to screen positive for depression than the heterosexual group, but they did not detect differences between the bisexual, pansexual, and queer groups. Finally, using data from a national sample of New Zealanders, Greaves et al. (2019) found that pansexual people reported higher psychological distress than bisexual people.

Identity-related experiences among subgroups of bi+ individuals

Similarly, few studies have examined potential differences in identity-related experiences among subgroups of bi+ individuals. Mereish and colleagues (2017) found that, compared to pansexual individuals, bisexual and queer individuals reported more discrimination from heterosexual people and less internalized biphobia, and bisexual individuals also reported more discrimination from gay/lesbian people. In addition, Mitchell and colleagues (2015) found that, compared to pansexual/queer/fluid[1] individuals, bisexual individuals reported more discrimination from gay/lesbian people. Although it may seem contradictory that pansexual individuals report less discrimination than other bi+ individuals (Mereish et al., 2017; Mitchell et al., 2015), but also report worse mental health (Greaves et al., 2019), this could be due to existing measures of discrimination not capturing the unique stressors they experience.

[1]Fluid has been defined as "a sexual orientation in which the level of attraction to people of the same or a different gender varies over time" (Bisexual Resource Center, 2020), but there has been a lack of empirical attention to the meaning of fluid as a sexual identity. Instead, research has typically focused on the construct of sexual fluidity, which has been defined as "a capacity for variation in sexual responsiveness due to situational, interpersonal, and contextual influences" (Diamond et al., 2020, p. 2389). The term sexual fluidity has been used to describe several different phenomena though, including experiencing sexual desires or engaging in sexual behaviors that diverge from one's self-described sexual orientation as well as experiencing changes in one's sexual attractions and behaviors over time (for a review, see Diamond et al., 2020).

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The use of multiple labels to describe one's sexual orientation

Finally, it is common for bi+ people to use multiple labels to describe their sexual orientation (Galupo et al., 2015, 2017; Mitchell et al., 2015) or to use different labels in different contexts (Mohr et al., 2017), and they are more likely to do so than gay/lesbian people (Galupo et al., 2015; Mohr et al., 2017). Bi+ people may be more likely to use multiple labels for a variety of reasons, including as a way to manage stigma and avoid discrimination (Mohr et al., 2017; Rust, 2002), because existing labels do not sufficiently reflect their experiences (Galupo et al., 2014), or because of the gender of their partner (Mohr et al., 2017). This presents challenges to researchers who rely on participants fitting into discrete categories to compare them. If, however, a person uses multiple labels, then discrete categorization may not be possible or appropriate. Very few studies have examined whether bi+ people who use one versus multiple labels differ with respect to identity-related experiences or mental health. In an exception, Bauer and colleagues (2016) compared three groups of bi+ people (those who only identified as bisexual, those who only used another label, and those who identified as bisexual and used another label) on their likelihood of endorsing multiple mental health and/or substance use problems. They found that those who only identified as bisexual were more likely to endorse multiple mental health and/or substance use problems than both of the other groups. Still, given the limited research on multiple sexual identity label use, additional research in needed to understand its role in bi+ people's experiences and mental health.

The current study

To address these gaps, the goals of the current study were to explore potential differences in disclosure, minority stress (discrimination from heterosexual and gay/lesbian people, anticipated and internalized binegativity), and mental health (anxiety, depression) among bi+ adults based on primary sexual identity and multiple label use. The limited available evidence suggests that pansexual people would report higher anxiety, depression, and internalized binegativity than other bi+ people, but that they would also report less discrimination. That said, given the lack of prior research in this area, especially on multiple label use, we considered these analyses exploratory.

Method

Procedure

Participants were recruited via paid advertisements on social media (Facebook and Instagram) as part of a larger study focused on bi+ identity, minority stress, and health. Eligibility criteria included: (1) 18 years of age or older; (2) reside in the US; and (3) report attractions to more than one gender or regardless of their gender. In order to recruit a sample that was diverse with respect to gender, we used quotas to cap enrollment of cisgender women and cisgender men at one-third of the desired sample size for each group. This approach ensured that at least one-third of the sample would be transgender/nonbinary. Eligible participants were directed to an online consent form and survey. Participants were compensated with a $10 Amazon gift card. This study was approved by the Institutional Review Board at Northwestern University.

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Participants

A total of 777 participants completed the survey, but 108 were excluded from analyses because they: (1) failed multiple attention checks ($n = 25$); (2) completed the survey using a duplicate IP address ($n = 14$); or (3) reported a primary identity other than bisexual, pansexual, or queer, and there were too few to examine them as a separate group (e.g., fluid, heteroflexible, asexual; $n = 69$). The analytic sample included 669 participants ages 18–62 ($M = 26.0$, $SD = 8.1$). Participants reported primary sexual identities of bisexual (53.2%), pansexual (26.3%), or queer (20.5%). The sex/gender composition of the sample was 32.1% cisgender women, 26.5% cisgender men, 8.8% transgender women, 4.0% transgender men, and 28.6% nonbinary individuals. The sample was predominantly White (82.1%), followed by Biracial/Multiracial (6.4%), Black (3.9%), Asian (2.7%), American Indian or Alaska Native (1.8%), Native Hawaiian or Other Pacific Islander (0.3%), or a different race (2.8%). In regard to ethnicity, 12.0% identified as Latinx.

Measures

All questionnaires used the term “bi+,” which was defined at the beginning of the study, to account for the range of labels that can be used to describe attractions to more than one gender.

Primary sexual identity and multiple label use.—First, participants were asked, “Which of the following commonly used terms best describes your sexual orientation?” (bisexual, pansexual, queer, fluid, gay, lesbian, straight, unsure/questioning, asexual, different identity). Participants could only select one. Then, they were asked, “Do you use any other terms to describe your sexual orientation?”

Disclosure.—The 5-item disclosure subscale of the Nebraska Outness Scale (Meidlinger & Hope, 2014) was used. Participants were asked, “What percent of the people in this group do you think are aware that you are bi+?” They were asked to respond with regard to five groups: immediate family; extended family; people you socialize with; people at your work/school; and strangers. Each item was rated on a 0–100% scale and responses were averaged ($\alpha = .77$). The original measure referred to “your sexual orientation,” but we changed it to “being bi+” given that bisexual people may be out as sexual minorities but not as bisexual (Mohr et al., 2017).

Brief Anti-Bisexual Experiences Scale—(Brief ABES; Dyar et al., 2019). The 8-item Brief ABES was used to assess discrimination from heterosexual and gay/lesbian people. It assesses three types of discrimination: (1) sexual orientation instability (e.g., “People have addressed be being bi+ as if it means that I am simply confused about my sexual orientation”); (2) sexual irresponsibility (e.g., “People have treated me as if I am obsessed with sex because I am bi+”); and (3) interpersonal hostility (e.g., “Others have treated me negatively because I am bi+”). The items were administered twice, once referring to heterosexual people and once to gay/lesbian people. Each item was rated on a 6-point scale (1 = never, 6 = almost all the time) and averaged to create subscale scores for experiences with heterosexual ($\alpha = .90$) and gay/lesbian people ($\alpha = .93$).

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Internalized and Anticipated Binegativity.—The Bisexual Identity Inventory (Paul et al., 2014) was used to assess internalized binegativity (e.g. "I would be better off if I would identify as gay or straight, rather than bi+;" 5 items; α = .83) and anticipated binegativity (e.g., "I feel that I have to justify my bi+ identity to others;" 5 items; α = .67). Each item was rated on a 7-point scale (1 = strongly disagree, 7 = strongly agree) and responses were averaged to create subscale scores.

Anxiety.—The Generalized Anxiety Disorder Scale (Spitzer et al., 2006) was used to assess anxiety over the past two weeks (e.g., "Being so restless that it is hard to sit still"). Each item was rated on a 4-point scale (1 = not at all, 4 = nearly every day) and responses were averaged (α = .92).

Depression.—The Patient Health Questionnaire–8-item version (Kroenke et al., 2009) was used to assess depression over the past two weeks (e.g., Little pleasure or interest in doing things"). Each item was rated on a 4-point scale (1 = not at all, 4 = nearly every day) and responses were averaged (α = .89).

Data analysis

First, in SPSS, we examined the bivariate associations between demographics and our other variables of interest. Then, in Mplus, we examined the associations between primary sexual identity and our outcomes using linear regression (first without covariates and then including age, race/ethnicity, and sex/gender, given evidence that they are related to bi+ individuals' mental health [e.g., Dyar et al., 2020; Ross et al., 2018]). Primary sexual identity was dummy-coded with bisexual as the reference group. We also ran the analyses with pansexual as the reference group to compare pansexual and queer participants to each other. Finally, we examined the associations between multiple label use and our outcomes (first without covariates and then including age, race/ethnicity, sex/gender, and primary sexual identity). Primary sexual identity was included as an additional covariate to examine the unique associations between multiple label use and our outcomes. There were no missing data for demographics and only one participant was missing data for disclosure. Missing data ranged from 10.0% to 11.4% for all other variables and was handled using full information maximum likelihood.

Results

Preliminary analyses

Age was positively associated with discrimination from gay/lesbian people ($r = .26$, $p < .001$) and negatively associated with anticipated binegativity ($r = -.10$, $p = .01$), anxiety ($r = -.14$, $p = .001$), and depression ($r = -.12$, $p = .004$). Age was not significantly associated with disclosure, discrimination from heterosexual people, or internalized binegativity. Race/ethnicity was significantly associated with internalized binegativity, $t(233.88) = -2.62$, $p = .01$, and depression, $t(591) = -1.99$, $p = .05$. Internalized binegativity was higher among participants of Color ($M = 2.37$, $SD = 1.29$) than White participants ($M = 2.06$, $SD = 1.14$). Depression was also higher among participants of Color ($M = 2.40$, $SD = .81$) than White participants ($M = 2.26$, $SD = .78$). Race/ethnicity was not significantly associated with

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disclosure, discrimination from heterosexual or gay/lesbian people, anticipated binegativity, or anxiety.

Sex/gender was significantly associated with disclosure, discrimination from gay/lesbian people, internalized binegativity, anxiety, and depression (see Table 1). First, transgender women reported more disclosure than cisgender men, cisgender women, and nonbinary individuals. Nonbinary individuals also reported more disclosure than cisgender men and cisgender women. Second, transgender women reported more discrimination from gay/lesbian people than all other groups. Third, cisgender men reported more internalized binegativity than cisgender women, transgender men, and nonbinary individuals. Cisgender women also reported more internalized binegativity than nonbinary individuals. Finally, nonbinary individuals reported more anxiety and depression than cisgender men, cisgender women, and transgender men. Sex/gender was not significantly associated with discrimination from heterosexual people or anticipated binegativity.

Primary sexual identity

Demographic correlates.—Primary sexual identity was significantly associated with sex/gender, $\chi^2(8) = 80.06$, $p < .001$. Bisexual identity was less common among transgender women (37.3%) and nonbinary individuals (30.4%) than cisgender women (64.7%) and cisgender men (69.5%). Pansexual identity was more common among transgender women (33.9%) and nonbinary individuals (36.6%) than cisgender women (20.0%) and cisgender men (20.9%). Similarly, queer identity was more common among transgender women (28.8%) and nonbinary individuals (33.0%) than cisgender women (15.3%) and cisgender men (9.6%). Queer identity was also more common among transgender men (25.9%) than cisgender men. Primary sexual identity was not significantly associated with age or race/ethnicity.

Associations with disclosure, minority stress, and mental health.—Results are presented in Table 2. Primary sexual identity was significantly associated with disclosure, such that pansexual and queer participants reported more disclosure than bisexual participants. These comparisons remained significant after adjusting for demographics. Queer participants also reported more disclosure than pansexual participants, but this became non-significant in adjusted analyses.

Primary sexual identity was also significantly associated with discrimination from heterosexual people and internalized binegativity. Compared to bisexual participants, pansexual and queer participants reported more discrimination from heterosexual people. The comparison with pansexual participants remained significant after adjusting for demographics, but the comparison with queer participants became non-significant. Pansexual participants also reported lower internalized binegativity than bisexual participants, but this also became non-significant in adjusted analyses. Primary sexual identity was not significantly associated with discrimination from gay/lesbian people or anticipated binegativity.

Primary sexual identity was significantly associated with anxiety and depression. Pansexual and queer participants reported higher anxiety than bisexual participants, but these became

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non-significant after adjusting for demographics. Pansexual participants also reported higher depression than bisexual participants, and this remained significant in adjusted analyses.

Multiple label use

Over half of participants (55.2%) endorsed using multiple labels (see Table 3). The number of other labels used (not including one's primary label) ranged from 1–6 ($M = 1.89$, $SD = 1.02$). Primary sexual identity was significantly associated with the number of other labels used, $F(2, 366) = 9.93$, $p < .001$, such that pansexual ($M = 2.03$, $SD = .97$) and queer ($M = 2.16$, $SD = 1.16$) participants used more other labels than bisexual participants ($M = 1.64$, $SD = .90$). In addition, queer participants (36.2%) were more likely than pansexual (20.9%) and bisexual (23.6%) participants to use "gay" as one of their labels, $\chi^2(2) = 7.01$, $p = .03$. Queer participants (14.9%) were also more likely than bisexual participants (3.6%) to use "asexual" as one of their labels, $\chi^2(2) = 10.50$, $p = .01$. Finally, queer participants (55.3%) were more likely than bisexual participants (30.9%) to use "pansexual" as one of their labels, $\chi^2(1) = 14.90$, $p < .001$.

Demographic correlates.—Multiple label use was significantly associated with sex/gender, $\chi^2(4) = 15.07$, $p = .005$, and primary sexual identity, $\chi^2(2) = 25.03$, $p < .001$. Cisgender women (54.9%), transgender women (59.3%), and nonbinary individuals (63.4%) were more likely to use multiple labels than cisgender men (44.1%). Although transgender men (63.0%) were also more likely to use multiple labels than cisgender men, this comparison was not significant, likely due to the relatively small number of transgender men in the sample. In addition, pansexual (62.5%) and queer (68.6%) participants were more likely to use multiple labels than bisexual participants (46.3%). Multiple label use was not significantly associated with age or race/ethnicity.

Associations with disclosure, minority stress, and mental health.—Results are presented in Table 4. Multiple label use was significantly associated with disclosure and discrimination from heterosexual and gay/lesbian people. Participants who used multiple labels reported more disclosure than those who used one label, but this became non-significant after adjusting for demographics. Participants who used multiple labels also reported more discrimination from heterosexual and gay/lesbian people than those who used one label. The association with discrimination from gay/lesbian people remained significant in adjusted analyses, but the association with discrimination from heterosexual people became non-significant. Multiple label use was not significantly associated with internalized binegativity, anticipated binegativity, anxiety, or depression.

Discussion

The goals of the current study were to explore potential differences in disclosure, minority stress, and mental health among bi+ adults based on primary sexual identity and multiple label use. Overall, we found several significant differences in identity-related experiences and mental health based on primary sexual identity and, to a lesser extent, multiple label use. We discuss these findings and their implications below.

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Primary sexual identity

First, pansexual and queer participants reported more disclosure than bisexual participants. Our findings for pansexual participants are consistent with evidence that pansexual individuals are more likely than bisexual individuals to use certain strategies to make their sexual identity visible (Davila et al., 2020). Given that pansexuality is less visible than bisexuality, pansexual individuals may be particularly motivated to make their sexual identity visible. In addition, given that queer is often used as an umbrella term for any non-heterosexual or non-cisgender identity (Kolker et al., 2020), queer individuals may feel more comfortable disclosing their sexual identity than bisexual individuals because doing so does not definitively communicate their attractions to more than one gender.

Second, compared to bisexual participants, pansexual participants reported more discrimination from heterosexual people. Queer participants also reported more discrimination from heterosexual people, but this association became non-significant after adjusting for demographics. In addition, pansexual participants reported lower internalized binegativity than bisexual participants, but this association also became non-significant in adjusted analyses. In contrast, Mereish and colleagues (2017) found that bisexual and queer individuals reported more discrimination from heterosexual people and less internalized biphobia than pansexual individuals. However, they had very few pansexual individuals in their sample, and they did not account for potential demographic confounds in their analyses.

Third, consistent with prior research (Borgogna et al., 2019; Greaves et al., 2019), pansexual participants reported higher depression than bisexual participants. Pansexual and queer participants also reported higher anxiety than bisexual participants, but these comparisons became non-significant after adjusting for demographics. Although one prior study did not find significant differences in screening positive for depression between bisexual, pansexual, and queer individuals (Horwitz et al., 2020), they allowed participants to select multiple labels and then they created mutually exclusive categories, which may have masked potential differences between groups.

Multiple label use

Consistent with evidence that it is common for bi+ people to use multiple labels to describe their sexual orientation (Galupo et al., 2015, 2017; Mitchell et al., 2015), 55.2% of our participants used multiple labels, and transgender/nonbinary individuals and cisgender women were more likely to do so than cisgender men. Given that queer can be used to describe any non-heterosexual or non-cisgender identity (Kolker et al., 2020), transgender/nonbinary individuals may use queer in addition to bisexual/pansexual because it can be used to describe their gender as well. Furthermore, prior research has found that cisgender men are more likely to use bisexual to describe their attractions to more than one gender than they are to use other labels (Katz-Wise et al., 2017), which may explain why they were less likely to use multiple labels. We also found that pansexual and queer participants were more likely to use multiple labels than bisexual participants. Given that transgender/nonbinary individuals were more likely to identify as pansexual or queer, and that they were

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more likely to use multiple labels, this may explain why pansexual and queer participants were more likely to use multiple labels as well.

We found several significant differences between participants who used one versus multiple labels, but the only difference that remained significant after adjusting for demographics was that participants who used multiple labels reported more discrimination from gay/lesbian people. Given that some bi+ people use multiple labels to manage stigma or avoid discrimination (Mohr et al., 2017; Rust, 2002), experiencing more discrimination from gay/lesbian people may lead to using multiple labels to avoid discrimination. In contrast, multiple label use was not significantly associated with internalized or anticipated binegativity, anxiety, or depression. Of note, the extent to which using multiple labels is associated with minority stress and mental health may depend on whether multiple labels are used because they are perceived as conceptually similar or to avoid stigmatization in certain contexts. Previous research has found that interpersonal motivations for concealing one's bi+ identity (e.g., concern about being judged or treated negatively) are associated with depression and anxiety, whereas intrapersonal motivations (e.g., one's bi+ identity not being a central part of one's overall identity) are not (Feinstein et al., 2020). It will be important for future research to examine bi+ individuals' motivations for using different labels in different contexts and their implications.

Gender diversity and mental health

A large proportion of our sample identified as transgender or nonbinary. We intentionally recruited a sample that was diverse with respect to gender, but prior research has found that transgender and nonbinary individuals are particularly likely to identify as bi+ (James et al., 2016). Consistent with recent studies (see Matsuno & Budge, 2017), nonbinary individuals reported more anxiety and depression than cisgender men, cisgender women, and transgender men. This is likely due to the unique stressors that nonbinary individuals experience in a society that is structured around a gender binary (Matsuno & Budge, 2017). Although we did not assess stressors related to one's gender identity, we found that nonbinary individuals reported less internalized binegativity than cisgender men and cisgender women. Given that bi+ identities are also nonbinary (Callis, 2014), experiencing one's gender as nonbinary may facilitate acceptance of one's sexual orientation as nonbinary as well.

Limitations

First, all of our participants identified as bisexual, pansexual, or queer, but there are other labels that can be used to describe attractions to more than one gender (e.g., fluid), some people who identify as heterosexual or gay/lesbian report attractions to more than one gender, and some people reject labels altogether. Second, despite our relatively large sample, we were unable to examine specific combinations of sexual identities. Third, although race/ethnicity was not associated with primary sexual identity or multiple label use, our sample was predominantly White and we may have been underpowered for these analyses. Internalized binegativity and depression were higher among participants of Color than White participants though, highlighting the need for additional research focused on bi+ people of Color. Fourth, we did not assess whether participants used multiple labels concurrently

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or in different contexts, or their reasons for using multiple labels, both of which may have important implications. Finally, although our measure of discrimination was previously validated among bisexual, pansexual, and queer individuals (Dyar et al., 2019), it was initially developed for use with bisexual individuals and it does not capture the unique challenges associated with identifying as pansexual or queer.

Implications and Conclusions

Our findings highlight the heterogeneity of bi+ individuals and the importance of considering bisexual, pansexual, and queer individuals as unique groups. Given that pansexual individuals report worse mental health than other bi+ individuals, there is a need for more research in this area, especially to understand how mental healthcare providers can best support them. Bi+ individuals have described negative experiences with mental healthcare providers (Eady et al., 2011), and clinicians have reported lower perceived competence for affirmative practice with bisexual clients than gay/lesbian clients (Ebersole et al., 2018). Pansexual individuals face unique challenges, and clinicians may need training to understand the range of bi+ identities and to challenge stereotypes about them. Finally, given that our study was one of the first to compare bi+ individuals who use one versus multiple sexual identity labels, additional research is needed to better understand the role of multiple label use in disclosure, minority stress, and mental health. Our findings provide preliminary support for multiple label use being associated with experiencing more discrimination from gay/lesbian individuals. Efforts may be needed to reduce stigma against people who use multiple labels to describe their sexual orientation. In order to continue to advance research in this area, researchers are encouraged to provide response options for a range of bi+ identities when assessing sexual identity and to assess whether participants use one or multiple labels.

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Public Significance Statement:

This study suggests that there may be important differences among subgroups of bi+ individuals based on their primary sexual identity (bisexual, pansexual, or queer) and whether they use one or multiple sexual identity labels. Pansexual individuals appear to be at particular risk for discrimination and depression, and bi+ individuals who use multiple sexual identity labels may also be at risk for discrimination. These findings highlight the importance of assessing sexual identity in ways that attend to the diverse range of bi+ identities as well as the use of multiple labels.

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Table 1.

Associations between sex/gender and outcome variables.

Outcome	Cisgender men *M (SD)*	Cisgender women *M (SD)*	Transgender men *M (SD)*	Transgender women *M (SD)*	Nonbinary individuals *M (SD)*	*F* test
Disclosure	.40 (.24)[a]	.40 (.22)[a]	.48 (.23)	.55 (.19)[b]	.48 (.21)[c]	$F(663, 4) = 9.05$, $p < .001$
Discrimination (heterosexuals)	2.81 (1.06)	2.85 (1.08)	2.83 (.92)	3.17 (1.07)	3.01 (1.08)	$F(596, 4) = 1.62$, $p = .17$
Discrimination (gays/ lesbians)	2.27 (1.03)[a]	2.08 (1.01)[a]	2.09 (1.12)[a]	2.60 (1.21)[b]	2.25 (1.04)[a]	$F(597, 4) = 2.91$, $p = .02$
Anticipated binegativity	4.12 (1.11)	4.26 (.99)	3.80 (1.45)	3.82 (1.32)	4.10 (1.14)	$F(663, 4) = 2.22$, $p = .07$
Internalized binegativity	2.43 (1.32)[a]	2.14 (1.14)[b]	1.87 (.93)[b]	2.23 (1.26)	1.88 (1.04)[c]	$F(596, 4) = 5.00$, $p = .001$
Anxiety	2.32 (.84)[a]	2.44 (.91)[a]	2.21 (.82)[a]	2.45 (.89)	2.69 (.80)[b]	$F(589, 4) = 4.62$, $p = .001$
Depression	2.17 (.77)[a]	2.18 (.77)[a]	2.13 (.72)[a]	2.41 (.93)	2.53 (.75)[b]	$F(588, 4) = 6.40$, $p < .001$

Note. Different superscripts within the same row indicate that the mean comparisons are significant ($p < .05$).

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Table 2.

Associations between primary sexual identity and disclosure, minority stress, and mental health.

		Unadjusted			Adjusted			
Outcome	**Predictor**	**Unstandardized**	**SE**	**P**	**Unstandardized**	**SE**	**P**	**Mean**
Disclosure	Bisexual	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	0.41
	Pansexual	**0.07**	**0.02**	**≤0.001**	**0.05**	**0.02**	**0.02**	**0.46**
	Queer [1]	**0.12**	**0.02**	**≤0.001**	**0.09**	**0.02**	**≤0.001**	**0.50**
Discrimination (heterosexuals)	Bisexual	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	2.81
	Pansexual	**0.25**	**0.10**	**0.02**	**0.21**	**0.11**	**0.05**	**3.02**
	Queer	**0.26**	**0.11**	**0.02**	0.20	0.11	0.07	3.02
Discrimination (gays/lesbians)	Bisexual	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	2.18
	Pansexual	0.17	0.11	0.11	0.10	0.11	0.36	2.28
	Queer	0.17	0.11	0.11	0.09	0.11	0.39	2.27
Anticipated binegativity	Bisexual	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	4.15
	Pansexual	−0.13	0.11	0.25	−0.08	0.11	0.47	4.07
	Queer	−0.11	0.12	0.35	−0.05	0.12	0.67	4.10
Internalized binegativity	Bisexual	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	2.17
	Pansexual	**−0.27**	**0.11**	**0.01**	−0.16	0.11	0.13	2.00
	Queer	−0.08	0.13	0.52	0.07	0.13	0.60	2.24
Anxiety	Bisexual	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	2.41
	Pansexual	**0.20**	**0.08**	**0.02**	0.15	0.09	0.08	2.56
	Queer	**0.19**	**0.09**	**0.04**	0.13	0.09	0.16	2.54
Depression	Bisexual	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	2.25
	Pansexual	**0.26**	**0.07**	**≤0.001**	**0.18**	**0.08**	**0.02**	**2.42**
	Queer	0.13	0.08	0.12	0.04	0.08	0.63	2.29

[1] Queer participants also reported higher levels of disclosure than pansexual participants did (unstandardized estimate = 0.05, SE = 0.03, $p = 0.04$), but this became non-significant after controlling for demographics (unstandardized estimate = 0.04, SE = 0.03, $p = 0.08$).

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Table 3.

Other sexual identity labels endorsed by participants who used multiple sexual identity labels.

Variable	All (*n* = 369)	Bisexual (*n* = 165)	Pansexual (*n* = 110)	Queer (*n* = 94)
Other sexual identity labels[1]				
Bisexual	126 (34.1%)	-	72 (65.5%)	54 (57.4%
Pansexual	103 (27.9%)	51 (30.9%)	-	52 (55.3%)
Queer	180 (48.8%)	109 (66.1%)	71 (64.5%)	-
Fluid	76 (20.6%)	28 (17.0)	25 (22.7%)	23 (24.5%)
Gay	96 (26.0%)	39 (23.6%)	23 (20.9%)	34 (36.2%)
Lesbian	22 (6.0%)	7 (4.2%)	5 (4.5%)	10 (10.6%)
Heterosexual	2 (0.5%)	2 (1.2%)	0 (0.0%)	0 (0.0%)
Unsure/questioning	21 (5.7%)	11 (6.7%)	6 (5.5%)	4 (4.3%)
Asexual	29 (7.9%)	6 (3.6%)	9 (8.2%)	14 (14.9%)
Different identity	41 (11.1%)	17 (10.3%)	12 (10.9%)	12 (12.8%)
Number of other sexual identity labels				
1	169 (45.8%)	95 (57.6%)	41 (37.3%)	33 (35.1%)
2	110 (29.8%)	45 (27.3%)	34 (30.9%)	31 (33.0%)
3	59 (16.0%)	17 (10.3%)	26 (23.6%)	16 (17.0%)
4	26 (7.0%)	6 (3.6%)	9 (8.2%)	11 (11.7%)
5	4 (1.1%)	2 (1.2%)	0 (0.0%)	2 (2.1%)
6	1 (0.3%)	0 (0.0%)	0 (0.0%)	1 (1.1%)
Mean (*SD*)	1.89 (1.02)	1.64 (0.90)	2.03 (0.97)	2.16 (1.16)

[1]Other sexual identity labels are not mutually exclusive (i.e., one participant could endorse more than one other sexual identity label).

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Table 4.

Associations between multiple identity label use and identity-related constructs, stigma-related stressors, and mental health.

		Unadjusted			Adjusted[1]			
Outcome	**Predictor**	**Unstandardized**	**SE**	**P**	**Unstandardized**	**SE**	**P**	**Mean**
Disclosure	Single	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	0.43
	Multiple	**0.05**	**0.02**	**0.01**	0.03	0.02	0.12	0.45
Discrimination (heterosexuals)	Single	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	2.83
	Multiple	**0.19**	**0.09**	**0.03**	0.14	0.09	0.13	2.97
Discrimination (gays/lesbians)	Single	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	2.07
	Multiple	**0.31**	**0.09**	**≤0.001**	**0.26**	**0.08**	**0.001**	**2.34**
Anticipated binegativity	Single	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	4.10
	Multiple	0.002	0.09	0.98	0.04	0.10	0.71	4.14
Internalized binegativity	Single	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	2.18
	Multiple	−0.16	0.10	0.10	−0.08	0.10	0.42	2.10
Anxiety	Single	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	2.51
	Multiple	−0.01	0.07	0.84	−0.06	0.07	0.38	2.44
Depression	Single	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	2.35
	Multiple	−0.04	0.07	0.58	−0.09	0.07	0.18	2.26

[1]Adjusted for age, race/ethnicity, sex/gender, and primary identity.