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Social media use among bisexuals and pansexuals: connection, harassment and mental health

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ABSTRACT

Analysing survey data from 1,304 LGBTQ+ young people in Australia collected in 2016, this paper considers key distinctions between the experiences of bisexual and pansexual participants, and lesbian and gay participants in relation to social media use and aspects of connection, harassment and mental health. Presenting quantitative data, illustrated by qualitative extracts, we found broad similarities in motivations for using social media and how participants connected to peers and communities. There were some statistically significant differences, however, in respondents' motivations for using social media and who they connected with on these platforms. Importantly, bisexual and pansexual participants reported more negative experiences of harassment and exclusion across all major social media platforms when compared to their lesbian and gay peers. Bisexual and pansexual respondents also reported poorer mental health experiences. These findings speak to the different impacts of discrimination and oppression that young people experience in everyday life. There is a need for focused attention on bisexual and pansexual young people in academic, policy and youth-work domains. Young people will benefit from more substantial school-based education on LGBTQ+ identities - beyond the experiences of gay and lesbian people - to 'usualise' varieties of difference in gender and sexual identity.

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Introduction

Bisexuality, or the romantic or sexual attraction to more than one gender, is understudied (Eisner 2013; Monro, Hines, and Osborne 2017). As an umbrella term, bisexuality incorporates bisexual, pansexual, (sometimes) queer and other multigender

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attracted identities. A greater number of young people in the UK (Dahlgreen 2015) and Australia (Richters et al. 2014) are reporting multigendered sexual attraction. At the same time, studies suggest that bisexuals experience a greater incidence of mental health problems—such as depression, anxiety and eating disorders—when compared to heterosexuals, lesbians and gay men (Jorm et al. 2002; Colledge et al. 2015; Hickson et al. 2017; Rimes et al. 2019). Bisexual mental health disparities require further attention as LGBTQ+ health inequality scholarship tends to merge together the health experiences of different minoritised sexual identities (Escobar-Viera et al. 2018; McDermott, Nelson, and Weeks 2021; Westwood et al. 2020). It is critical to develop more work in this field given the growing - or at least more statistically visible—population of bisexual young people across the globe (Dahlgreen 2015).

Digital media have been shown to be key to LGBTQ+ young people's experiences of connection, support and understanding, and exploring identity (Craig and McInroy 2014; Robards et al. 2018; Robards, Byron, and D'Souza 2021). The recent increase in language and discourse around sexuality and gender has been partially attributed to digitally mediated sites of learning that allow people with similar experiences to connect, develop shared languages, and overcome a sense of isolation (Cover 2019; Robards et al. 2020). In a quickly changing sexual and social landscape, digital spaces can be where new(er) labels are being developed and discussed in youth digital discourses (see, for example, *Understanding Non-Binary People: How to Be Respectful and Supportive*, 2018; *What's the Difference Between Bisexual and Pansexual?*, 2020). Social media has been found to be a resource of support, community and education for LGBTQ+ young people due to the ability to connect with communities of similar interests (Fox and Ralston 2016; Hanckel and Chandra 2021).

Against this background, this paper focuses on patterns of social media use and experiences of harassment, exclusion and mental health among bisexuals and pansexuals - those who are multigender attracted. Notably, these two different sexual identities are linked together for the purpose of analysis, for reasons we explain in detail in the next section. This paper has four main sections. First, we provide a background for our framing of bisexuality/pansexuality, looking at the development of this as a broad (and contested) category, including in mental health research. Second, we introduce the Scrolling Beyond Binaries study, from which we draw the data for this paper. In this survey we asked about social media practices and motivations, sexuality and gender identities, mental health, and experiences of harassment and exclusion. In the third section, we map our findings across 1) motivations for using social media and negotiating connections; 2) experiences of harassment and exclusion; and 3) experiences of mental health. Finally, we highlight our contributions to the study of bi/pansexuality.

Lesbians, gay men, bisexuals and pansexuals have different lived experiences, informed by sexual identities, genders and romantic/sexual relationships, but also shaped by race, class, location, culture and other social structures. While it may be easier to use the language of 'single gender attracted' and 'multi gender attracted' people, these concepts further simplify lived experience by denying participants the identities they nominate and find meaningful. This paper compares lesbian/gay people's experiences to those of bisexual/pansexual people to highlight specific issues faced by the latter, given that bisexual and pansexual experiences are under-

researched (Monro, Hines, and Osborne 2017). We use the terms 'bisexual and pansexual' since these were meaningful terms to study participants and remind us that we need not fold these identities into a single category. While this study indicates statistically significant experiences of harassment, exclusion and mental health, it is important to recognise that this is an indicative finding and more research is needed prior to generalisation.

Bisexuality and pansexuality: a note on terminology

The term bisexual is often used in scholarship to describe people with a multigendered attraction. The term is often used to include people with bisexual, pansexual, queer and other multigender attracted identities. However, this term is not without criticism as bisexuality is an attraction to multiple genders whereas pansexuality is described as an attraction regardless of gender, and queer refuses to be defined. A fuller discussion of these tensions is evident in Flanders' (2017) research, which charts the tensions between inclusivity, exclusivity and specificity in distinguishing between different multigender attracted identities. These contradictions must be acknowledged in the use of bisexual as an umbrella term throughout this paper.

Bisexuality: social pressures, mental health and connection

Bisexual, pansexual and other multigendered attracted identity labels are increasingly used by young people (Dahlgreen 2015), although members of these groups still encounter significant discrimination and remain marginalised identities. Bisexuals are often regarded in both heterosexual and LGBTQ+ spaces as 'greedy', 'cheaters' and/or 'hypersexual' individuals (Weiss 2003; Callis 2013; Eisner 2013; Wandrey, Mosack, and Moore 2015; Feinstein et al. 2016; Tran, Sullivan, and Nicholas 2022). Scholars have described 'bisexual erasure' as "the widespread social phenomenon of erasing bisexuality from any discussion in which it is relevant or it is otherwise invoked" (Eisner 2013, 66). This erasure can be both explicit, seen in suggestions that bisexuality is a 'phase' or a 'transition' or implicit, as in the assumption that someone is a lesbian, gay or heterosexual based on their partner's gender.

Bisexuals are often excluded from both LGBTQ+ spaces or communities (Weiss 2003), and heterosexual spaces and communities (Alarie and Gaudet 2013). This results in bisexuals experiencing discrimination through exclusion, omission and the questioning of their identities (McLean 2008; Welzer-Lang 2008; Monro 2015; Roberts, Horne, and Hoyt 2015), and feeling that they do not belong to a community (McLean 2007, 2008). As a result, some bisexuals and pansexuals choose to 'pass' as either heterosexual, gay or lesbian to accommodate the conflicts that they often come across (Maliepaard 2017; Bostwick and Hequembourg 2014; Nelson 2020a, 2020b). These experiences can impact on the management of romantic relationships, friendships, workplaces, and healthcare engagements due to real or perceived biphobic discrimination (Nelson 2020a, 2020b; Pennington 2009; See and Hunt 2011).

Work examining bisexuals' and pansexuals' needs has highlighted the importance and necessity of bisexual identities being recognised, communities being accessible,

and representations being visible, to enhance feelings of authenticity and connection (Nelson 2020a, 2020b). The exclusion and rejection of bisexual identities has been linked to poor mental and/or physical health outcomes for bisexual people (Jorm et al. 2002; Walters, Chen, and Breiding 2013; Colledge et al. 2015; Escobar-Viera et al. 2018). Large scale studies in Australia, the UK and the USA have demonstrated that bisexual people are often more likely to variously experience depression, suicidality, domestic violence, sexual violence, anxiety and eating disorders than their heterosexual, gay, and lesbian counterparts (Jorm et al. 2002; Walters, Chen, and Breiding 2013; Colledge et al. 2015). McDermott and Roen (2016) highlight how LGBT mental health inequalities are influenced significantly by environmental factors related to heteronormative environments and incidents of homo/bi/transphobia. In a bisexual context, the discrimination resulting from biphobic discourse from both heteronormative communities and LGBT communities has been suggested as a way through which negative health disparities emerge (Jorm et al. 2002; Walters, Chen, and Breiding 2013; Colledge et al. 2015).

Because of social exclusion or omission due to homo/bi/transphobia, it is unsurprising that many LGBTQ+ people use social media to explore and understand their identities, both through more passive consumption such as reading and watching, and through active engagement such as chat, discussion forums, joining groups, and sharing their own content (Fox and Ralston 2016; Byron et al. 2019). The Internet can be a site of information, understanding, connection, interaction, developing social capital, and identity development providing critical 'subcultural knowledge' for young people, produced by reading and watching but also by doing, acting, rehearsing and producing (Hanckel and Morris 2014). Understanding how bisexual people access and interpret this kind of subcultural knowledge is critical given their difficulties navigating lesbian, gay and heterosexual communities (Lapointe 2017; McLean 2008; Robards, Byron, and D'Souza 2021). Connections amongst LGBTQ+ people via the Internet can build resilience and strength through relating to similar others, and can be carried into physical spaces to counter discrimination (Craig and McInroy 2014; Chong et al. 2015; Lapointe 2017). Understanding whether this latter finding is important to bisexuals is important given bisexuals' unique navigation of sexual identity, social acceptance and mental health experiences.

Many experiences of bi-invisibility and bi-erasure have been researched in 'offline' contexts. Maliepaard (2017) has noted that most existing work on bisexual and pansexual online spaces has emphasised online sexual activities or examined individual blog posts, as opposed to exploring bisexual and pansexual community and identity. However, Maliepaard's own work into bisexual and pansexual digital spaces has indicated how such spaces can be 'safe', allowing connection, supporting mental health and promoting acceptance (2017). Thus, digital spaces can help alleviate negative experiences of discrimination, oppression or negation. However, digital spaces can also be sites of exclusion, marginalisation, biphobia and bi-erasure.

The Scrolling Beyond Binaries study

The Scrolling Beyond Binaries study was an Australian study of social media use among LGBTIQ+ young people aged 16–35 (mean age: 21.9 years). We kept our

definition of youth broad to a) account for a range of definitions of youth; b) recognise the “prolonging” of youth (due to delayed transitions in employment, housing, relationships, and so on (see White, Wyn, and Robards 2017); and c) in order to understand differences in use between people in their teenage years vs twenties vs thirties, all of whom who would have grown up in an era of social media ubiquity. The project was conducted with ethical clearance from the University of Tasmania. It involved a national survey conducted in 2016 ($n = 1304$) and follow-up interviews with volunteers from the survey in 2017 ($n = 24$). We focus here on the survey data, particularly from bisexual and pansexual respondents. Respondents were largely recruited through shared and boosted posts on social media including paid advertising on Facebook and Instagram, and organic sharing and re-sharing on Twitter, Facebook and Instagram (See Robards et al. 2018; Byron et al. 2019; Hanckel et al. 2019; and Vivienne et al. 2021 for a more detailed description of the study).

Sample

With respect to the quantitative sample, 46% of respondents identified as female, 27% as male, 21% as non-binary, almost 3% as gender-fluid, and another 3% as other genders such as agender, simply ‘trans’, or rejecting categorisation. In terms of sexuality, 34% of respondents identified as lesbian or gay (LG), 25% as bisexual and 12% as pansexual (BP) and it is these two groups that we focus on in this paper. The remainder of the participants identified as queer (19%), and asexual (5%) along with a range of smaller (<1%) identifications such as demisexual and greysexual. As participants who identified as queer may have fit into either LG or BP groupings, or defied those categorisations altogether, we have not included them in the analysis of bisexual and pansexual people here (see Vivienne et al. 2021 for further discussion). Instead, we restrict our analysis to those who identified as lesbian/gay and bisexual/pansexual, to compare and contrast these groups. In doing so, we are not suggesting that lesbian and gay experiences are similar, but were measuring how different they were to those of bisexual and pansexual participants.

We also asked demographic questions around Indigeneity (3% of respondents identified as Aboriginal), country of birth (88% were born in Australia, 3% in Asia Pacific, 3% in the UK, 2% in North America, 2% in Europe and 1% in New Zealand), current location (66% reported living in ‘urban’, 25% as ‘regional’, and 9% as ‘rural’ areas), education and employment status (65% were studying and 60% were employed).

Respondents were also asked about which social media platforms they used, motivations for use, time use patterns, and experiences on different platforms. The most frequently used platform in the wider sample was Facebook, with 97% of our respondents using this platform, followed by YouTube (84%), Instagram (70%), Snapchat (66%), Tumblr (64%) and Twitter (49%). Almost one third (32%) of respondents also reported using some kind of dating or hook-up app, with the most popular being Tinder (21%), Grindr (11%), OkCupid (8%), Her (6%) and Scruff (5%).

Measures

To address the aims of this paper, we drew on four key measures in the data: (1) motivations for using social media; (2) who respondents connected with the most on social media; (3) experiences of harassment on social media; and (4) self-reported mental health.

Motivations was a categorical variable derived from responses to the question, 'What is your primary motivation (if you had to choose just one for using each of the following social media platforms?)'. The question was asked across a number of domains: (1) communicating with friends and family; (2) communicating with a partner; (3) communicating with colleagues; (4) communicating with people who are 'like me'; (5) meeting new friends; (6) meeting potential romantic/sexual partners; (7) and other, for each of the selected social media platforms.

Connections was a variable derived from responses to a question about who respondents connected with on these social media platforms. Responses included: parents, siblings, friends, partner, acquaintances, colleagues, people you would like to meet, and potential romantic/sexual partner(s). Each response category constituted a separate indicator variable.

Harassment as a variable was derived from responses to the question 'have you ever experienced harassment on the following list of social media platforms. Select as many that apply'.

The assessment of *mental health well-being* derived from responses to the question 'during the past 4 weeks, how much have you been bothered by emotional problems (such as feeling anxious, depressed or irritable)?' which is a question from the standard SF-8 measures to assess mental health. The SF-8 has been found to be a reliable and valid tool for assessing subjective health and well-being in general and specific populations (Yiengprugsawan, Kelly, and Tawatsupa 2014) and is adapted from the SF-36 which is commonly used in larger population surveys. Responses to this question were given on a five-point Likert scale (1 = excellent, 2 = very good, 3 = good, 4 = fair, 5 = poor).

Analytic strategy

We used descriptive statistics to describe bisexual and pansexual respondents' (BP) and lesbian and gay respondents' (LG) motivations for using social media, connections on social media, harassment, and mental health and wellbeing.

We created an indicator variable to indicate sexuality: bisexual and pansexual respondents = 0 and lesbian and gay respondents = 1. We used Chi-square tests of independence to test the association between sexuality and motivations, connections and harassment. Chi-square tests were chosen because they are the most appropriate to explore whether there is a statistically significant relationship between two categorical variables, for example sexuality and motivations, or sexuality and connections (Ragaini 2019). We treated mental health well-being as a continuous variable and use t-tests to compare the two groups. We used t-tests here because mental health is a continuous variable, and we were interested in comparing the mean difference

between the two groups (gay/lesbian vs bisexual and pansexual respondents) on mental health scores (Ragaini 2019).

Qualitative responses in survey

The survey included open ended text response boxes for participants to provide qualitative responses. For some questions, more than half of respondents chose to clarify and elaborate on their feelings and experiences. We have drawn on some of these quotes to illustrate the broader survey findings.

Author positionality

The authors have a variety of different genders and sexual identities, including gay, bisexual, queer, non-binary, trans, and cis. This was salient in developing the survey, collecting data, and analysing the survey findings due to authorial experience of identities, language and terminology, and experience. Throughout the study, our multiple insider/outsider positions enabled us to use appropriate language, target real-life issues, and analyse the data with an appropriate understanding of context.

Findings

There were three key findings from the survey when comparing lesbian and gay respondents (LG) with bisexual and pansexual respondents (BP). First, comparing lesbian and gay respondents (LG) with bisexual and pansexual (BP) respondents, we can see some broad similarities in motivations for using social media and the connections made. However, there were significant differences in who people chose to connect with. Second, bisexual and pansexual participants reported higher experiences of harassment and exclusion on all major social media platforms. Third, bisexual and pansexual respondents tended to report poorer mental health, consistent with other research in this area (Jorm et al. 2002; Walters, Chen, and Breiding 2013; Colledge et al. 2015; Hickson et al. 2017; Rimes et al. 2019).

Motivations and connections

Our analysis of motivations for using social media and who respondents connected with on different platforms, included the top four social media platforms in the sample, plus the most popular dating/hook-up app: Facebook, Instagram, Snapchat, Tumblr, and Tinder. We excluded YouTube which, whilst frequently used by 84% of our respondents, was used to watch content, rather than to actively post, (as was common with other platforms). We included Tinder to consider the most popular dating/hook-up app at the time.

In Tables 1–5, motivations for using Facebook (Table 1), Instagram (Table 2), Snapchat (Table 3), Tumblr (Table 4) and Tinder (Table 5) are presented. Key motivating factors were: (1) connecting with friends and family; (2) connecting with one's partner/s; (3) connecting with colleagues; (4) connecting with 'people like me';

Table 1. Motivation for using Facebook, lesbian/gay (LG) and bisexuals and pansexuals (BP) (%).

Factor	Lesbian/gay (LG)	Bisexual/pansexual (BP)
Communicating with friends and family	84.76	80.00
Communicating with a partner	2.51	5.61
Communicating with colleagues	1.92	0.98
Communicating with people like me	6.36	5.37
Meeting new friends	0.89	1.22
Meeting potential partners	0.15	0.24
Other	3.40	6.59
Total	100.0	100.0

Table 2. Motivation for using Instagram, lesbian/gay (LG) and bisexuals and pansexuals (BP) (%).

Factor	LG	BP
Communicating with friends and family	49.18	39.52
Communicating with a partner	0.61	0.00
Communicating with colleagues	1.02	1.03
Communicating with people like me	22.95	28.87
Meeting new friends	3.89	2.75
Meeting potential partners	0.20	0.00
Other	22.13	27.84
Total	100.0	100.0

Table 3. Motivation for using Snapchat, lesbian/gay (LG) and bisexuals and pansexuals (BP) (%).

Factor	LG	BP
Communicating with friends and family	87.05	86.73
Communicating with a partner	5.00	3.06
Communicating with colleagues	0.45	0.68
Communicating with people like me	2.05	2.72
Meeting new friends	0.68	0.68
Meeting potential partners	0.68	0.68
Other	4.09	5.44
Total	100.0	100.0

Table 4. Motivation for using Tumblr, lesbian/gay (LG) and bisexuals and pansexuals (BP) (%).

Factor	LG	BP
Communicating with friends and family	2.79	2.51
Communicating with a partner	0.47	0.00
Communicating with colleagues	0.00	0.99
Communicating with people like me	61.40	72.04
Meeting new friends	4.42	3.58
Meeting potential partners	0.70	0.00
Other	30.23	21.86
Total	100.0	100.0

Table 5. Motivation for using Tumblr, lesbian/gay (LG) and bisexuals and pansexuals (BP) (%).

Factor	LG	BP
Communicating with friends and family	0.00	0.00
Communicating with a partner	0.00	1.20
Communicating with colleagues	0.00	0.00
Communicating with people like me	2.82	0.00
Meeting new friends	12.68	13.25
Meeting potential partners	81.69	83.13
Other	2.82	2.41
Total	100.0	100.0

Table 6. Connections using social media, lesbian and gay (LG) and bisexual and pansexual (BP) (%).

Connect with	Platform														
	Facebook			Instagram			Snapchat			Tumblr			Tinder		
	LG	BP	Sig	LG	BP	Sig	LG	BP	Sig	LG	BP	Sig	LG	BP	Sig
Family	49.82	54.45		8.28	6.63		4.99	4.97		0.24	0.00				
Siblings	55.42	52.59		18.88	15.94		18.64	18.84		1.95	1.45				
Partner	43.12	44.51		18.64	14.08	**	19.00	22.77		4.99	5.38		0.37	0.21	
Friends	81.24	83.85		54.57	54.87		52.13	59.01	**	26.19	30.8	*	0.85	1.66	
Acquaintances	81.24	83.85		39.10	38.30		18.03	22.98	**	19.12	25.8	***	0.85	1.66	
Colleagues	45.31	39.54	**	15.10	10.56	**	6.94	6.42		1.10	1.04		0.12	0.00	
Potential friends	20.34	22.77		24.85	28.1		9.87	12.01		27.77	34.78	***	10.60	9.73	
Potential partners	13.64	14.08		6.58	6.00		7.67	9.73		4.63	5.80		15.83	15.32	

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Source: Scrolling Beyond Binaries Study (2016)

(5) meeting new friends; (6) meeting potential partners; and (7) other. The category of ‘people like me’ was intentionally open-ended to capture a group of people that might include perceived queer community, a fan community, or communities within communities.

These seven broad categories worked to map differences across platforms in terms of who participants were connecting with. For those who used social media platforms primarily for ‘other’ reasons, motivations are unclear. For some, this might include pornography on Tumblr before the NSFW content ban (Bronstein 2020), or it might include a more passive form of browsing or even personal content curation that we have explored elsewhere (Byron et al. 2019).

A Chi-square test of independence found a statistically significant association between sexuality and motivations. In Table 1, we can see that LG respondents were more motivated to use Facebook to connect to family and friends, colleagues and people ‘like me’, whereas BP respondents were more motivated to use Facebook for connecting with partners, meeting new friends, potential partners and ‘other’ reasons ($p < 0.05$). In Table 2, we can see that LG respondents were more likely to be motivated to use Instagram to connect to family and friends, partners, new friends and potential partners, whereas BP respondents were more likely to be motivated to use Instagram communicating with people ‘like me’ and ‘other reasons’ ($p < 0.10$). In Table 4, we can see that LG respondents were more likely to be motivated to use Tumblr to communicate with friends/family, partner, meeting new friends or a potential partner, whereas BP respondents were more motivated to use Tumblr to communicate with colleagues and particularly, people ‘like me’ ($p < 0.001$).

In Table 6, the connections both LG and BP respondents made on Facebook, Instagram, Snapchat, Tumblr and Tinder are reported. A Chi-square test of independence found a statistically significant association between sexuality and connections. Across most of the platforms, there were very few differences between LG and BP participants and who they connected with on Facebook, Instagram, Snapchat, Tumblr and Tinder. LG people were more likely to connect with colleagues on Facebook (45.31% vs 39.52%, $p < .05$) and Instagram (15.1% vs. 10.5%, $p < .05$) than BP people. LG respondents were also more likely to connect with their partner on Instagram (18.6% vs. 14.0%, $p < .05$). On the other hand, BP people were more likely to connect with

Table 7. Experiences of harassment across social media platforms, lesbian and gay (LG) and bisexual and pansexual (BP) (%).

	Platform														
	Facebook			Instagram			Snapchat			Tumblr			Tinder		
	LG	BP	Sig	LG	BP	Sig	LG	BP	Sig	LG	BP	Sig	LG	BP	Sig
Harassment	29.84	37.89	***	5.72	8.70	***	3.17	7.45	***	9.62	13.04	**	2.80	3.93	

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Source: Scrolling Beyond Binaries Study (2016)

friends on Snapchat (59.0% vs. 52.1%, $p < .05$) and Tumblr (30.8% vs. 26.1%, $p < .05$). This was a similar pattern with friends on Snapchat (22.9% vs. 18% $p < .05$) and Tumblr (25.8 vs. 19.8%, $p < .05$). BP respondents were also more likely to meet new friends than LG respondents on Tumblr (34.78% vs. 27.7%, $p < 0.001$).

Experiences of harassment and exclusion on social media

While the patterns of motivations for using social media were similar between LG and BP groups, there were significant differences when it came to experiences of harassment and exclusion.

Over half of all LGBTQ+ respondents reported experiencing some form of harassment when using Facebook, Instagram, Snapchat, Tumblr and Twitter, but bisexual and pansexual (BP) respondents were even more likely to experience harassment (Table 7). In the survey we defined harassment as ‘behaviour that is offensive, intimidating, humiliating and threatening on the basis of a particular personal characteristic. This may be related to your gender, sexuality, or intersex status, or other characteristics’. This definition was adapted from a longer definition developed by the Australian Human Rights Commission Harassment (2022). Just over half (51.02%) of LG participants reported occasionally experiencing harassment, based on this definition, compared to 62.68% of BP participants. 3.79% of LG respondents reported ‘frequently’ experiencing harassment, compared to 4.23% of BP respondents. Almost half (45.19%) of LG respondents reported never experiencing harassment, whereas only one third (33.1%) of BP respondents said the same.

Participants were asked if they had experienced harassment on social media and were asked to indicate which platforms (from a list of 25 commonly used platforms these experiences occurred on). We asked similar questions in relation to sexual harassment and bullying, but the following discussion only relates to experiences of general harassment. A Chi-square test found a statistically significant association between sexuality and harassment on social media platforms except for Tinder. When it came to harassment, Facebook stood out as a site where all participants were most likely to experience harassment. However, BP participants were significantly more likely to experience harassment (37.8%) on Facebook compared to LG respondents (29.8%) ($p < 0.001$). The proportion of respondents who experienced harassment on Instagram, Snapchat, Tumblr and Tinder was lower than that on Facebook. BP participants were more likely to experience harassment than LG participants on Tumblr (13% vs. 9.6%, $p < .05$), Snapchat (7.4% vs. 3.1%, $p < .001$) and Instagram (8.4% vs. 5.7%, $p < .001$).

Qualitative and contextual findings

The survey also included the option to add a qualitative response to the question of ‘In your opinion, do the benefits of digital social media outweigh the harms, if any?’ Although BP respondents clearly experienced harassment across a variety of social media platforms, many felt that the benefits of social media outweighed the harms:

Benefits outweigh the harm for me individually as I can be out on social media in a way I never can be in real life. Being around other people in the LGBTQIAP+ [community] online benefits my mental health considerably (17, female, bisexual)

This idea of social media providing resources and operating as a channel of support was a dominant theme in these responses and is explored in detail elsewhere (Byron et al. 2019). Crucially, some social media can facilitate a sense of collectivity that can help young people to deal with the heteronormative and hostile environments - both physical and digital - that have an impact on their life satisfaction and wellbeing (Bartram 2021). Many respondents pointed to how they would have not felt comfortable identifying as bisexual or pansexual without the support of online communities:

Yes, I wouldn't have been able to come out, or even have a name to put to how I felt about my gender and sexuality, if it wasn't for social media and I think that outweighs the harms I've experienced. (19, non-binary, bisexual)

In this way, it is the very language and terminology (such as bisexual and pansexual) that allows people to connect and find a ‘label’ through which they can locate their own experience as it relates to others. While most (80%) respondents focused on these positives, a smaller group (20%) reported a mixed and more complex response, including several respondents who thought, overall, social media could do more harm than good:

...there still is a trend of harassment in the social media community and it is still a problem although I, personally am not affected, I still acknowledge the severity of this trend. (17, non-binary, bisexual)

For some bisexual and pansexual respondents, there was also the suggestion that social media use always included some form of risk, in the same way that being present in any social situation can be risky:

Being yourself on social media is always a risk. I am always hesitant to share personal opinions (though generally it doesn't stop me), and quite often if it doesn't fit with the straight, cis gendered, often misogynistic agenda, I cop backlash for that. We all do. I've seen it play out over and over. Being yourself is a punishable crime on social media. (21, female, bisexual)

Bisexual and pansexual respondents had mixed thoughts about the benefits of being themselves across the Internet, which is in keeping with broader LGBTQ+ perspectives on the usage and role of social media in terms of connecting with others (See: Hanckel and Chandra 2021).

Table 8. Average mental health scores for lesbian/gay (LG) and bisexual and pansexual (BP) respondents.

	Lesbian/gay (LG)	Bisexual/pansexual (BP)	Sig.
Mental health	3.05	3.60	***

Notes: Higher scores indicate poor mental health; *** $p < .001$

Source: Scrolling Beyond Binaries Study (2016)

Table 9. Average mental health scores across platforms for lesbian/gay (LG) and bisexual and pansexual (BP) respondents.

	Platform														
	Facebook			Instagram			Snapchat			Tumblr			Tinder		
	LG	BP	Sig	LG	BP	Sig	LG	BP	Sig	LG	BP	Sig	LG	BP	Sig
Mental health	2.38	2.76	***	2.30	2.85	***	2.40	2.85	***	2.50	2.80	***	2.20	2.91	***

Notes: Higher scores indicate poor mental health; * $p < .05$, ** $p < .01$, *** $p < .001$

Source: Scrolling Beyond Binaries Study (2016)

Mental health comparisons

In [Table 8](#), we analyse how self-reported mental health and well-being differed between LG and BP respondents in the study. These data draw on responses to a question about general mental health over the four week period prior to taking the survey, with a high score indicating that the respondent experienced poorer mental health at the time of the survey. The question asked was, 'during the past 4 weeks, how much have you been bothered by emotional problems (such as feeling anxious, depressed or irritable)?' which comes from the standard SF-8 measures to assess mental health (Yiengprugsawan, Kelly, and Tawatsupa 2014). Responses to this question were: 1 = excellent, 2 = very good, 3 = good, 4 = fair, 5 = poor.

For our analysis, we calculated an average score for both LB and BP participants in response to this question and used t-tests to see whether there was a statistically significant difference between the groups. We then calculated mean scores of reported mental health and wellbeing experiences for both groups across Facebook, Instagram, Tumblr and Tinder and ran t-tests again to see whether there were differences between LG and BP participants on these platforms. Higher scores indicated poorer mental health, and all results were statistically significant at the 1 percent level. As [Table 9](#) indicates, lesbian/gay respondents reported better overall mental health (3.05 vs 3.60 $p < .001$) than bisexual/pansexual respondents. Across platforms as [Table 9](#) indicates, lesbian/gay respondents reported having better mental health experiences on Facebook, Twitter, Tumblr and Tinder compared to bisexuals/pansexuals.

Discussion

Findings from this study contribute to ongoing discussion about the impact of biphobia, bisexual invisibility, and bisexual erasure. While LGBTQ+ people encounter many similar challenges, forms of marginalisation and exclusion, there are also important differences within the broad LGBTQ+ umbrella. While there are a range of similarities between lesbian/gay and bisexual/pansexual respondents when it comes to motivations for using social media, especially as channels for learning, connecting and

navigating sometimes hostile heteronormative social worlds (Fox and Ralston 2016; Robards et al. 2018, 2020; Bartram 2021), there are also important differences in experiences of harassment, exclusion and the ways mental health is experienced both broadly and in different social media platforms.

The statistically significant difference between the digital harassment experienced by LG and BP participants is a critical finding, pointing to the cultures of monosexism experienced by BP people in digital spaces. Previous work has documented monosexism in both heterosexual and LGBTQ+ physical spaces (Weiss 2003; Callis 2013; Eisner 2013; Wandrey, Mosack, and Moore 2015; Feinstein et al. 2016; Tran, Sullivan, and Nicholas 2022) but our data suggest that social microaggression and more blatant acts of harassment and discrimination also occur in digital spaces. BP respondents experienced a higher incidence of harassment than LG respondents as well as reporting experiencing harassment far more frequently than LG participants. Further work is needed to better understand how this is occurring in heterosexual and/or LGBTQ+ spaces online and when, since cultures of monosexism have been shown to exist both within and beyond queer spaces (Weiss 2003; Callis 2013; Eisner 2013; Wandrey, Mosack, and Moore 2015; Feinstein et al. 2016).

Many BP participants used Tumblr to find ‘people like me’. However, this was the site that showed the highest statistically significant difference in reported harassment (12% of LG reported harassment versus 17% of BP participants). This finding suggests that BP people may face additional barriers to building community building, even in spaces that may be framed as “queer” and “safe” (Byron 2019; Robards et al. 2018, 2020).

Exclusion and harassment can have a negative impact on mental health (Berzins, Petch, and Atkinson 2003). We found a significant difference in mental health scores between bisexual/pansexual and lesbian/gay respondents in this study: BPs had overall higher scores than LGs, and thus poorer mental health experiences across all platforms in our sample. Although qualitative responses suggested that BP respondents expected to experience harassment in online spaces, it is important to note that the benefits of connecting with other LGBTQ+ people were highlighted more often than the negative effects of being harassed online by the majority (but not all) participants.

The mental health findings from this study align with research which demonstrates bisexual and pansexual people experienced poorer mental health outcomes when compared to gay and lesbian people (Jorm et al. 2002; McDermott, Nelson, and Weeks 2021; Hickson et al. 2017; Colledge et al. 2015). This is a critical finding from the study and social media may be one space that can impact, facilitate, and highlight mental health and wellbeing inequalities across minoritised sexualities and genders.

Conclusion

In this paper we have demonstrated two important findings relating to bisexual and pansexual experiences on social media. First, bisexual and pansexual people reported higher levels of harassment and exclusion on major social media platforms including Facebook, Instagram, Snapchat, Tumblr, and Tinder when compared to their lesbian

and gay peers. Second, bisexual and pansexual people had notably worse perceptions of their own mental health when compared to their lesbian and gay peers.

Together, these two findings suggest that bisexual and pansexual people experience different barriers, opportunities, forms of discrimination, and privileges in online spaces. The reported difference in mental health between bisexual and pansexual people compared to lesbian and gay people suggests that more work needs to be done to explore how mental health is impacted in digital spaces. As bisexuals and pansexuals are often subject to biphobic exclusion, omission and/or discrimination in everyday life, it is important to recognise that these forces also take place in digital spaces.

While digital media may be celebrated as channels for learning, connecting and finding experiences of belonging for many LGBTQ+ people, it is important to also acknowledge that some queer people are marginalised and excluded within these spaces. Our analysis here focussed primarily on differences between lesbian/gay respondents and bisexual/pansexual respondents. Further research should also consider differences in experience within LGBTQ+ communities along other axes, including gender, race and class.

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