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Research Paper

Variations in suicidality across multiple social identities in asexual people: An intersectionality analysis

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ABSTRACT

This study draws upon intersectionality theory to describe variations in suicidal ideation and behaviour across gender, romantic identity, race and age among a sample of self-identified asexual individuals. Using data from the 2020 Ace Community Survey ($n = 10,005$), interactive multinomial logistic regression models were used to assess the impact of various social identities on suicidal behaviour and ideation, as well as the presence of any significant interactions. Findings indicate that (a) being female and BIPOC and (b) being nonbinary/trans and aromantic or currently questioning one's romantic identity yielded significantly higher odds of reporting suicidal ideation. Findings also indicate that being aromantic and in the middle (30–44) or older (45+) age category resulted in significantly lower odds of suicidal ideation. No interaction effects were found to be statistically significant for suicidal behaviour. This study contributes to growing research in the area of intersectionality and, specifically, the need for researchers to consider how multiple social identities interact to impact the mental health and well-being of asexual individuals. Policy and practice implications are discussed.

1. Introduction

Evidence indicates that sexual and gender minority individuals report poorer mental health compared to their heterosexual and cis-gender counterparts (Borgogna et al., 2019) and face higher rates of suicidal ideation and behaviour (Liu et al., 2020; Lucassen et al., 2011; Marshall et al., 2011). Suicidal ideation encompasses thoughts or considerations regarding suicide, ranging from passive reflections to active planning, and serves as a significant risk factor for future suicide attempts (Klonsky et al., 2016; Nock et al., 2008). Suicidal behaviour involves self-injurious actions with at least some intent to die, which includes both suicide attempts and death by suicide (O'Connor and Nock, 2014). The presence of mental health disparities among LGBTQ+ individuals may stem from increased incidents of victimisation and discrimination within this population (Chan and Leung, 2023; Lyons et al., 2022; Marshall et al., 2011), alongside the negative psychological effects related to minority stress, including mood disorders, anxiety disorders, and substance use disorders (Meyer, 2003). Although

extensive research has been carried out on the experiences of stressors (e.g., anti-gay violence) and suicidality among LGBTQ+ individuals, the literature largely neglects the experiences of those who identify along the asexual spectrum (Borgogna et al., 2019; Hill et al., 2022; McInroy et al., 2020; Xu et al., 2023; Yule et al., 2013).

Asexuality may be defined as a lack of sexual attraction (Bogaert, 2015) and identification along the asexual spectrum (Brotto and Yule, 2017; Greaves et al., 2017). Typically, asexual individuals report less sexual desire and fantasies than allosexual (e.g., heterosexual, gay/lesbian, bisexual, pansexual) individuals (Copulsky and Hammack, 2021; Prause and Graham, 2007; Yule et al., 2013), with an "absence of sexual attraction" directed towards others (Brunning and McKeever, 2021, p. 498; Catri, 2021). Recent scholarly work indicates that the asexual community is particularly heterogenous (Brotto and Yule, 2017; Brunning and McKeever, 2021; Kelleher et al., 2022), including a range of sub-identities that best describe asexual individuals' experiences (Chasin, 2015; Hammack et al., 2019; Kelleher and Murphy, 2022b; MacNeela and Murphy, 2015). The spectrum present within the asexual

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community includes various sexual identities such as gray-asexual, demi-sexual (e.g., experiencing sexual attraction very rarely or only under specific circumstances) and sex-averse (e.g., experiencing discomfort, repulsion, or anxiety about engaging in sexual activity) which fall under the umbrella term of 'ace' or asexuality (Chasin, 2015; Greaves et al., 2017; Kelleher and Murphy, 2022b).

Research indicates that asexual individuals experience heightened levels of suicidality (McInroy et al., 2020), a term which encompasses suicide-related thoughts and behaviours such as suicidal ideation, plans, attempts, and completed suicide (Turecki and Brent, 2016). For example, McInroy et al. (2020) reported that 40.3 % of asexual young adults had attempted suicide, while Chan and Leung (2023) found that approximately 32.2 % of asexual individuals reported suicidal ideation, 10.6 % had made suicide plans, and 2.7 % had attempted suicide in the past. This trend is also reflected in studies concerning asexual adolescents, where research highlights an elevated risk of suicidal ideation (Renteria et al., 2021). These high rates of suicidal ideation and behaviours are linked to systemic stressors such as discrimination, stigma, and social inequalities (Chan and Leung, 2023; McInroy et al., 2020). Nonetheless, this field of research remains in its infancy, necessitating further exploration of suicidality among asexual individuals (Liang and Chen, 2024).

Higher rates of suicidal ideation and behaviours within this population can be understood through minority stress theory (Meyer, 2003), which suggests that external (e.g., discrimination) and internal (e.g., internalised homophobia) stressors related to sexual identity have distinct psychological consequences for asexual individuals (Chan and Leung, 2023; Fink, 2023). In the context of an allonormative, 'sex-positive' society, asexual individuals may encounter greater stigma than other sexual minorities (MacInnis and Hodson, 2012, p. 739; Yule et al., 2013), leading them to internalise a negative perception of their orientation (Bogaert, 2012; Kelleher et al., 2022; Przybylo, 2013; Robbins et al., 2016), thereby resulting in heightened suicidality (McInroy et al., 2020). A lack of information surrounding asexuality may further contribute to the delegitimisation of this orientation (Decker, 2015; Hoffarth et al., 2016; Kelleher et al., 2022; Kelleher and Murphy, 2022a; MacInnis and Hodson, 2012; Scherrer, 2008), and asexual individuals may be less likely to access affirmative mental health services compared to other LGBTQ+ groups (Gupta, 2017).

Heightened suicidal ideation and behaviour may also be understood through the Interpersonal Theory of Suicide (IPTs) (Joiner, 2005), which posits that suicidality derives from feelings of burdensomeness, thwarted belongingness, and acquired capability. Although this framework has yet to be applied in the context of an asexual population, its capacity to map suicidality among LGBTQ+ people offers a promising approach for understanding how discrimination and rejection due to sexual identity may relate to suicidal ideation and behaviour among asexual individuals. For example, research suggests that stigma-related stress may heighten feelings of burdensomeness among LGBTQ+ people, which in turn contributes to suicidal ideation (Chang et al., 2021; Testa et al., 2017). Additionally, low social support, familial rejection, and school victimisation contribute to social isolation, which further reinforces suicidal ideation and behaviour among LGBTQ+ individuals (Lea et al., 2014; Mereish et al., 2017). Previous exposure to violence and discrimination may also heighten their acquired capability for suicidal behaviours (Philip et al., 2022).

2. Intersectionality, asexuality and suicidality

Evidence suggests that the intersection of asexuality with various social identities heightens the risk of poorer mental health outcomes (Boot-Haury et al., 2024), yet existing studies overlook other identities beyond sexuality that may exacerbate, moderate, or mitigate suicidal ideation and behaviour (Chan and Leung, 2023). Intersectionality theory examines the complexities of identity and how various forms of oppression, including racism, sexism, and classism, shape individual

experiences, particularly for marginalised groups (Crenshaw, 1991). Analysing sexual identity through an intersectional lens enables researchers to better understand how multiple social statuses influence an individual's experiences and affect their overall well-being (Frost et al., 2020). For instance, research exploring minority sexualities alongside other social statuses (i.e., race and gender) has found that the intersection of these marginalised identities may result in increased minority stress and negatively impact their identity coherence (Parmenter et al., 2022). Consequently, intersectionality is becoming an increasingly popular approach to examining suicidality among LGBTQ+ individuals (i.e., Ferlatte et al., 2018; Veenstra, 2011) and, more recently, asexual individuals (Chan and Leung, 2023). Despite the growing popularity of intersectionality theory in the social sciences, applications of intersectionality theory within research on asexuality are limited, with few currently employing an intersectional approach to understanding within-group differences in suicidal ideation and behaviours.

Although research has primarily focused on the proximal risk factors of suicidality, such as minority stress and anti-asexual bias, some evidence also exists concerning the intersection of social identities and suicidality among asexual individuals. For example, studies have identified differences in suicidality at the intersection of asexuality and gender norms, suggesting that suicidality is more prevalent among asexual men and transgender individuals than among women (Chan and Leung, 2023). This may be due to asexual men facing increased levels of disbelief stemming from the premise of inherent male sexual desire (Gupta, 2019), while transgender asexual individuals may be more susceptible to the impact of minority stress, resulting in a higher likelihood of suicidality (Chan and Leung, 2023). Furthermore, age is considered an important intersecting factor in the well-being of asexual individuals (Xu et al., 2023), with evidence indicating that younger asexual individuals are more likely to report suicidality (Chan and Leung, 2023) and experience an elevated risk of suicidal ideation (Renteria et al., 2021). This may be due to exclusion from major relationship markers, including being left out of dating platforms during asexual individuals' youth and a subsequent alienation from social networks centred on families and children (MacNeela and Murphy, 2015). This sense of isolation can, in turn, complicate interpersonal relationships with non-asexual people (Carrigan, 2011), thereby increasing the risk of suicidality among asexual youths.

Asexual individuals may face unique challenges in their desired relationships (Scherrer, 2008; Van Houdenhove et al., 2015), leading to varied experiences of loneliness and mental health shaped by societal norms regarding intimacy. (Foster et al., 2019; Kelleher and Murphy, 2022a). For example, romantic-identified asexual individuals may feel their asexuality complicates their relationships, impacting their dating experiences as they navigate a culture that connects romance to sexual intimacy (Dawson et al., 2019; Vares, 2021). Moreover, research indicates that negative reactions from partners and allonormative culture may negatively affect a positive sense of identity and self-perception among romantic-identified asexual individuals (Kelleher and Murphy, 2022b; Maxwell, 2017; Van Houdenhove et al., 2015; Yule et al., 2013). However, research has yet to examine the intersection between romantic identity and suicidal ideation and behaviour within the asexual population.

As the asexual community is predominantly white, there is limited research on the prevalence of asexuality within BIPOC communities and how race may intersect with other identities, such as gender and romantic orientation (Guz et al., 2022). Consequently, researchers have advocated for using intersectional analyses to better comprehend the relationship between race and asexuality and how this relationship may lead to unique experiences of compulsory sexuality, discrimination, and disapproval (Foster et al., 2019; Guz et al., 2022). Although research on the intersection of race and suicidality among asexual individuals is limited, existing research emphasises the need for further investigation into how overlapping minority identities influence suicidality among asexual people.

3. Aims of this research

This study draws upon intersectionality theory to describe variations in suicidal ideation and behaviour among asexual individuals according to gender, race, romantic identity and age. We utilised a multiplicative approach to intersectionality whereby outcomes such as suicidal ideations and behaviours were based upon interactions between social identities (Dubrow, 2008). Therefore, this research is inductive and, like previous studies examining intersecting effects of sexuality and self-rated health (i.e., Ferlatte et al., 2018; Veenstra, 2011), is exploratory and hypothesis-generating rather than confirmatory. This approach responds directly to current calls to address the dearth of quantitative research surrounding asexuality through an intersectional lens and to investigate critical subgroup differences in mental health problems that may arise from societal invalidation and misunderstanding, associated with asexuality (Chan and Leung, 2023; Gupta, 2019; Simon et al., 2022). Moreover, by taking into consideration intersecting identities, this research may help to provide appropriate intervention strategies that are not only sensitive to an individual's asexual identity but also their gender, race, romantic identity and age. When conceptualising suicidal ideation and behaviour in the current study, we utilised definitions of suicidal behaviour (i.e., self-injurious actions with at least some intent to die and suicide attempt) and ideation (i.e., suicidal ideas/ideation/thoughts/threats) separately (O'Connor and Nock, 2014; Klonsky et al., 2016; Nock et al., 2008).

4. Method

The current study used data from the Ace Community Survey, an annual survey which collects information surrounding demographic features and experiences of members of the asexual community. It is the largest international survey of ace communities and creates a valuable pool of data for ace community activists and researchers. The 2020 survey was open between October 30th and December 5th, 2020, and received 15,132 responses. Respondents from over 100 different countries took part in the survey, which was available to complete in multiple different languages, including English, German, Italian, Spanish and Portuguese. The survey was administered anonymously online. The participants included in the survey represent a convenience sample recruited via snowball sampling techniques. Announcements containing links to the survey were posted on the Ace Community Survey website, several major ace websites (AVEN, the Asexual Agenda, etc.), as well as asexuality and LGBTQIA+-themed groups and on various popular social networking sites (Facebook, Tumblr, Twitter, Reddit, Discord, etc.). The survey consisted of a core set of demographic questions (i.e., age, gender identity, sexual orientation, and geographic location), identity-related questions (i.e., ages of identity milestone progression), health and wellbeing aspects (i.e., mental health, physical health, and substance use), as well as questions pertaining to experiences of discrimination and stigma, relationships, and sexual activity. Participants were informed of the nature of the survey from the outset and that their participation was entirely voluntary. They were also informed of potentially triggering sections of the survey, including questions relating to sexual activity, sexual violence, suicide, and mental health, and were given the option to skip these sections without penalty. The Social Research and Ethics Committee of [Institution name here], Institutional Review Board (reference number: 2023-268) granted ethical approval for this secondary data analysis of the 2020 Ace Community Survey raw data.

4.1. Participants

Following the removal of partially completed or missing responses, the responses of 10,005 asexual individuals who completed the 2020 Ace Community Survey were included in the data analysis. Participants' self-reported characteristics are presented in Table 1. Among the participants included in this study, 21.2 % ($n = 2126$) reported suicidal

Table 1

Demographic characteristics of participants.

Characteristics	<i>n</i>	%
Age		
18 - 29	8136	81.3
30 - 44	1660	16.6
Over 45	209	2.1
Gender		
Woman or Female	4895	48.9
Man or Male	1067	10.7
Gender Nonbinary/Trans	4043	40.4
Romantic Identity		
Aromantic	3988	39.9
Romantic	3843	38.4
Questioning/Unsure	2174	21.7
Ethnicity		
White	7066	70.6
BIPOC	2939	29.4
Type		
None	6949	69.5
Suicidal Ideation	2126	21.2
Suicidal Behaviour	930	9.3

ideation, and 9.3 % ($n = 930$) reported suicidal behaviour in the past 12 months. Participants' ages ranged from 18 to 84 years ($M = 25.0$, $SD = 6.90$) and they reported diverse racial identities, including White, Black, Asian, Hispanic/Latinx, Indigenous, and multiracial categories. The majority identified as White ($n = 7066$), while 2939 participants identified as Black, Indigenous, or people of colour (BIPOC). While participants provided a broad array of racial identities such as Asian ($n = 628$), Black or African American ($n = 192$), and Latinx ($n = 910$), the complexity of responses limited detailed categorisation within the reporting of this study. For more detailed data, the full 2020 Ace Community Survey Summary Report (Ace Community Survey Team, 2022) is available on the Ace Community Survey website.

4.2. Measures

For this study, the following variables were analysed: General Survey Demographics, including sexual and romantic identities, age, country of residence, race and ethnicity; and Health and Ability, specifically questions related to suicidal ideation and behaviours. Information surrounding suicidal ideation and behaviour was collected by asking members to check a box indicating whether they had experienced the following in the last twelve months. "In the last 12 months, have you: Seriously thought about trying to kill yourself; Made any plans to kill yourself; Tried to kill yourself; or None of the above". If a member indicated "none of the above", they were considered not to have attempted, planned or considered suicide in the past year. These questions were designed to align with survey designs related to suicide (SAMHSA, 2018). Age was assessed by asking participants, 'In which year were you born?'. Race was measured with the question, 'Do you identify with any of the following racial/ethnic categories?'. A range of response options were provided, including Black or of the African Diaspora, Indigenous or Native American, Asian or Pacific Islander, Latinx or Hispanic, and White or of European Descent. Gender identity was determined by asking, 'Which (if any) of the following words would you use to describe your gender identity?'. Sexual identity was evaluated through the question, 'Which of the following sexual orientation labels do you most closely identify with?'. Finally, romantic identity was assessed by asking, 'Which (if any) of the following romantic orientation labels do you currently identify with?'. A variety of genders, as well as sexual and romantic identity options were provided, with participants also given the option to self-identify. A detailed list of options can be found on the full 2020 Ace Community Survey Summary Report (Ace Community Survey Team, 2022).

4.3. Data analysis

The current analyses focus on suicidal ideation and behaviour in the last 12 months. Only participants who responded yes to the question “Do you consider yourself to be on the asexual spectrum?” were included in the analysis. Before analysis, data were cleaned, and all missing responses were removed ($n = 5127$). The outcome or dependent variable ‘suicidality’ was recoded into a categorical variable to include three outcomes: ‘none’, ‘suicidal ideation’ and ‘suicidal behaviour’. Age was collected as a continuous variable and ranged from 18 to 84 years old. The age variable was recoded into a categorical variable with the following groups: 18 - 29 years old, 30 – 44 years old and over the age of 45. These age categories were selected in line with categories identified in previous studies examining variations among LGBTQ+ individuals according to age (i.e., [Ferlatte et al., 2018](#); [Martos et al., 2015](#)). Romantic identity was categorised into aromantic, romantic and unsure/questioning. Like previous studies, all racial minority identities were collapsed into black, Indigenous and people of colour (BIPOC) due to the subgroup potential to share experiences of racism and discrimination (i.e., [Ferlatte et al., 2018](#)). Finally, gender identity was categorised into female, male and nonbinary/trans. For analysis, trans (i.e., trans man, trans woman) and non-binary groups were combined to compare them to the binary groups (i.e., man and woman).

All statistical analyses were conducted using IBM’s Statistical Software Package for the Social Sciences (SPSS), version 21.0. Multinomial logistic regression models were carried out to assess the correlation of each identity variable on the presence of self-reported suicidal ideation or behaviour. The first outcome (none) was specified as the reference category for the dependent variable. Each nominal independent variable in the regression model was treated as a set of dummy variables with one dummy variable serving as the reference category. The largest group, ‘White’, was assigned as the reference category for the race variable to provide a stable reference point. For gender and romantic identity, ‘female’ and ‘romantic’ were also assigned as reference categories as they represented the largest groups. Finally, the youngest group (18 – 29) was assigned as the reference category for the age variable to provide a stable reference point. Following this, interactive multinomial logistic regression models were run between all combinations of identity variables to indicate significant interactions in the model. Specifically, multiplicative interaction terms (e.g., White*female) were entered individually into the model using a stepwise approach. This resulted in the most significant interaction terms being added to the model until no other stepwise terms left out of the model would have a statistically significant contribution if added to the model.

5. Results

Model fit improved with the addition of independent variables (see [Table 2](#)) and the final model is significantly different from the intercept-

Table 2
Model fitting information.

Model	Model Fitting Criteria			Likelihood Ratio Tests		
	AIC	BIC	–2 Log Likelihood	Chi-Square	Df	Sig.
Intercept Only	840.031	854.452	836.031			
Final	513.781	629.154	481.781	354.250	14	<0.001

Note. Model fitting criteria and likelihood ratio tests for multinomial logistic regression. AIC = Akaike Information Criterion; BIC = Bayesian Information Criterion; –2 Log Likelihood = measure of model fit, with lower values indicating better fit. The likelihood ratio Chi-Square test compares the full model to a reduced model, assessing the significance of predictors. df = degrees of freedom; Sig. = significance level (p-value), with values < 0.05 indicating statistical significance.

only model ($\chi^2(14) = 354.25, p < 0.001$). Thus, the independent variables, as a group, contribute significantly to the prediction of outcomes for both suicidal ideation and suicidal behaviour. A lower Akaike’s Information Criterion (AIC) and Bayesian Information Criterion (BIC) for the final model compared to the intercept-only model also suggests good fit ([Tabachnick et al., 2007](#)).

[Table 3](#) shows the effects of each variable as measured in a multinomial logistic regression analysis. Findings indicate that all variables, apart from the older age category (45+), increased the odds of suicidal ideation and suicidal behaviour. When compared to romantic participants, both aromantic and questioning participants had higher odds of suicidal ideation and behaviour. This trend was also seen for male and gender nonbinary/trans participants, who were more likely to report higher odds of suicidal ideation and behaviour compared to female participants. Although participants in the middle and older age categories had higher odds of suicidal ideation compared to those aged 18 – 29, the odds of reporting suicidal behaviour were not higher for the older age group relative to the younger group. Finally, BIPOC participants had higher odds of reporting both suicidal ideation and suicidal behaviour when compared to white participants.

[Table 4](#) summarises the steps in the analysis for interaction terms. After the main effects were entered (model 0), the Race x Female interaction term was entered (model 1) followed by Age x Aromantic (model 2) and Romantic Identity x Gender Nonbinary/Trans (model 3). The Chi-square statistics for Steps 1, 2 and 3 are significant, indicating that these interactions significantly improve the model’s ability to predict self-reported suicidal ideation and behaviour.

The expected odds ratios for interactions are reported in [Table 5](#).

Table 3
Multinomial logistic regression analysis.

Suicide type ^a		Sig.	OR	95 % Confidence Interval for Exp(B)	
				Lower Bound	Upper Bound
Suicidal Ideation	Intercept	<0.001			
	BIPOC	<0.001	1.346	1.211	1.497
	White	.	.	.	.
	45+	.025	.644	.438	.947
	30–44	<0.001	.782	.681	.897
	18–29	.	.	.	.
	Aromantic	<0.001	.784	.700	.877
	Questioning/Unsure	.020	.855	.750	.976
	Romantic	.	.	.	.
	Male	<0.001	1.330	1.122	1.576
	Gender nonbinary/trans	<0.001	1.934	1.740	2.149
	Female	.	.	.	.
Suicidal Behaviour	Intercept	<0.001			
	BIPOC	<0.001	1.685	1.459	1.945
	White	.	.	.	.
	45+	.070	.588	.331	1.044
	30–44	<0.001	.675	.549	.831
	18–29	.	.	.	.
	Aromantic	.002	.783	.669	.917
	Questioning/Unsure	.026	.807	.669	.974
	Romantic	.	.	.	.
	Male	<0.001	1.843	1.464	2.319
	Gender nonbinary/trans	<0.001	2.372	2.038	2.761
	Female	.	.	.	.

Note. Multinomial logistic regression results predicting suicidality with reference categories for race (White), age (18 – 29), romantic identity (Romantic) and gender (Female). Sig. = significance level (p-value), with values < 0.05 indicating statistical significance. Odds ratios (OR) are calculated as $\exp(\beta)$ and represent the change in odds for a one-unit increase in the predictor variable. 95 % confidence intervals (CI) provide a range of plausible values for ORs.

^a . The reference category is: none.

Table 4
Step summary.

Model	Action	Effect(s)	Model Fitting Criteria			Effect Selection Tests		
			AIC	BIC	−2 Log Likelihood	Chi-Square ^a	df	Sig.
0	Entered	Intercept, All	513.781	629.154	481.781	.		
1	Entered	Race*Female	502.333	632.128	466.333	15.448	2	<0.001
2	Entered	Age*Aromantic	494.384	653.022	450.384	15.949	4	.003
3	Entered	Romantic Identity*Gender nonbinary/trans	489.985	677.467	437.985	12.398	4	.015

Note. Model fitting criteria and effect selection tests for multinomial logistic regression. AIC = Akaike Information Criterion; BIC = Bayesian Information Criterion; −2 Log Likelihood = measure of model fit, with lower values indicating better fit. Chi-Square tests the significance of each effect in the model. df = degrees of freedom; Sig. = significance level (p-value), with values < 0.05 indicating statistical significance.

^a The Chi-Square for entry is based on the likelihood ratio test.

Table 5
Assessment for interactions using multinomial logistic regression.

Suicide type ^a		Sig.	Exp(B)	95 % Confidence Interval for Exp(B)	
				Lower Bound	Upper Bound
Suicidal Ideation	BIPOC*Female	<0.001	1.468	1.187	1.815
	White*Female	.	.	.	.
	45+*Aromantic	.006	3.077	1.388	6.820
	30–44*Aromantic	.064	.761	.571	1.016
	18–29*Aromantic	.	.	.	.
	Aromantic*Gender Nonbinary/Trans	.038	1.272	1.013	1.597
	Questioning*Gender Nonbinary/Trans	.002	1.516	1.159	1.982
	Romantic*Gender Nonbinary/Trans	.	.	.	.
Suicidal Behaviour	BIPOC*Female	.307	.856	.634	1.154
	White*Female	.	.	.	.
	45+*Aromantic	.149	.319	.068	1.506
	30–44*Aromantic	.415	.838	.547	1.283
	18–29*Aromantic	.	.	.	.
	Aromantic* Gender Nonbinary/Trans	.105	1.302	.946	1.792
	questioning*Gender Nonbinary/Trans	.055	1.451	.992	2.123
	romantic* Gender Nonbinary/Trans	.	.	.	.

Note. Multinomial logistic regression results. Sig. = significance level (p-value), with values < 0.05 indicating statistical significance. Exp(B) represents the odds ratio, where values greater than 1 indicate an increase in odds, and values < 1 indicate a decrease. The 95 % confidence interval (CI) for Exp(B) provides the lower and upper bounds, representing the range within which the true odds ratio is expected to fall with 95 % confidence.

^a The reference category is: none.

While male and nonbinary/trans participants had higher odds of suicidal ideation compared to female participants overall, being female and BIPOC yielded significantly higher odds of reporting suicidal ideation [OR 1.47 (95 % CI 1.19 – 1.82)]. Similarly, although aromantic participants reported higher odds of suicidal ideation, it was found that being aromantic and in the middle (30 – 44) or older (45+) age category resulted in significantly lower odds of suicidal ideation [OR 0.76 (95 % CI 0.57 – 1.02) and OR 3.08 (95 % CI 1.39 – 6.82) respectively]. Finally, although gender nonbinary/trans, aromantic and questioning participants reported higher odds of suicidal ideation, the interaction between romantic identity and gender revealed that identifying as both gender nonbinary/trans and aromantic [OR 1.27 (95 % CI 1.01 – 1.60)], or currently questioning one's romantic identity [OR 1.52 (95 % CI 1.16 – 1.98)], yielded significantly higher odds of reporting suicidal ideation. No interaction effects were found to be statistically significant for suicidal behaviour.

6. Discussion

The findings of this study support the higher prevalence of suicidal ideation and behaviour in the asexual community (Chan and Leung, 2023; McInroy et al., 2020). Suicidal behaviour was reported by 9.3 % of participants, while suicidal ideation was reported by 21.2 % of participants. Moreover, the presence of intersecting axes of minority identity aligns with previous research on suicidality among LGBTQ+ individuals (e.g., Ferlatte et al., 2018; Veenstra, 2011) and further demonstrates that the intersection of various social identities may heighten the risk of suicidality among asexual individuals (Chan and Leung, 2023). As the

first study of its kind, this research contributes to the IPTS framework regarding how discrimination and rejection based on sexual identity, alongside other social identities such as race, age, gender, and romantic identity, relate to suicidal ideation and behaviour among asexual individuals.

A significant increase in the likelihood of reporting suicidal ideation and behaviour among male participants may be attributed to assumptions of inherent male sexual drive and is consistent with previous research surrounding gender norms and masculinity among asexual men (Gupta, 2019; Kelleher et al., 2024; Vares, 2018). Moreover, increased incidences of suicidal ideation and behaviour observed among gender non-binary and transgender participants correspond with minority stress-related experiences and suicidality among asexual transgender individuals (Chan and Leung, 2023). From an intersectional perspective, societal invalidation of asexuality (MacInnis and Hodson, 2012) may be compounded by systemic discrimination and stigma associated with gender non-binary and transgender groups (Hendricks and Testa, 2012). These findings may also be understood through the IPTS framework, whereby discrimination heightens the risk of suicidality for transgender individuals (Testa et al., 2015). For instance, a 'thwarted' sense of belonging resulting from rejection and social isolation might elucidate the heightened risk of suicidal ideation and behaviour among transgender asexual participants. This aligns with previous research on transgender individuals' experiences of disconnection and estrangement when coming out (Ryan et al., 2010), limited access to supportive environments, and difficulties in obtaining gender-affirming care, all of which contribute to a heightened sense of isolation (Seelman, 2016). Moreover, internalised stigma, along with higher rates of physical and

sexual violence towards transgender individuals, may contribute to a sense of burdensomeness experienced by this group and underlie their increased risk of suicide (Claes et al., 2015; Testa et al., 2017; Stotzer, 2009).

BIPOC participants were more likely to report suicidal ideation and behaviour, corresponding with past research surrounding cumulative minority stress and adverse mental health outcomes among racial minority LGBTQ+ individuals (Balsam et al., 2011). As the first study of its kind to examine suicidality and race in the context of an asexual population, findings highlight how these intersecting identities may lead to unique experiences of compulsory sexuality, discrimination, and disapproval. Again, this may be understood through the IPTS framework, whereby the culmination of racial discrimination and heterosexism results in a heightened risk of suicidality among sexual minority groups (Chang et al., 2023; Forest et al., 2023). Specifically, this corresponds with research surrounding the combined effects of racism and heterosexism, whereby isolation and rejection from both cultural and LGBTQ+ communities may contribute towards an increased risk of suicide (Sutter and Perrin, 2016). Moreover, limited access to mental health services (Balsam et al., 2011) and elevated levels of systemic oppression and violence faced by LGBTQ+ racial minorities (Díaz et al., 2001) may further exacerbate the higher rates of suicidality observed in the study sample. At the intersection of race and gender, findings indicate that being female and BIPOC yields significantly higher odds of reporting suicidal ideation. This interaction aligns with investigations surrounding asexual individuals' experiences of marginalisation at the intersection of race and gender and the consequences of societal pressures surrounding sex and sexuality for BIPOC asexual women (Brown, 2022; Foster et al., 2019; MacNeela and Murphy, 2015; Owen, 2018). Furthermore, through the lens of the IPTS framework, the intersection of race and gender can contribute towards increased stress exposure and limited access to support, thereby heightening suicidality within this study sample. This may include elevated rates of poverty, unemployment, and wage gaps, which increase financial stress and reduce access to mental health resources among BIPOC women (Veldhuis et al., 2018).

Being aromantic or questioning one's romantic identity yielded significantly higher odds of reporting suicidal ideation and behaviour. While there is no prior literature addressing romantic identity and suicidality to compare these findings to, this increased prevalence of suicidality may be attributed to feelings of alienation and the invalidation of individuals' identities stemming from allonormative assumptions surrounding romantic relationships (Robbins et al., 2016). At the intersection of gender and romantic identity, findings indicate that identifying as nonbinary or transgender, as well as being aromantic or currently questioning one's romantic identity, yielded significantly higher odds of reporting suicidal ideation. This aligns with research surrounding how experiences of stigma and marginalisation, combined with questioning one's romantic identity or being aromantic, may result in increased vulnerability towards poorer mental health outcomes (Barreto and Boislard, 2023; McInroy et al., 2022). This heightened risk of suicidal ideation among participants may also be attributed to the combined effects of social exclusion, internalised stigma, and trauma as framed by the IPTS framework. Specifically, individuals with both a minority gender and a minority romantic identity may experience cumulative forms of discrimination and alienation across various contexts, thereby increasing their feelings of loneliness and isolation. For example, transphobia and dismissal of romantic orientation may result in exclusion from cis-heteronormative (Testa et al., 2015) and LGBTQ+ (Bauer et al., 2021) communities and heighten experiences of marginalisation within this sample. Furthermore, higher incidence of physical and sexual violence due to transphobia and misgendering (Testa et al., 2015), as well as corrective rape or coercion (Mollet and Black, 2023) may increase participants' capacity towards suicide.

A decreased likelihood of suicidal ideation and behaviour among younger participants is consistent with the role that the internet and online communities play in the discovery and acceptance of asexuality

(Kelleher and Murphy, 2022b, 2024), as well as shifting societal views of asexual and other LGBTQ+ identities (Martos et al., 2015). Moreover, from the perspective of the IPTS framework, feelings of belongingness associated with online asexual communities, as well as exposure to more affirmative representations of asexuality, may explain the reduction in younger participants' reports of suicidal ideation and behaviours. Specifically, a greater sense of social connection and acceptance among younger asexual participants may result in a reduced sense of isolation and foster greater feelings of belongingness. This, alongside increased peer acceptance, shifting societal attitudes, and positive media representation (Craig et al., 2021; Russell and Fish, 2016), may reduce perceived burdensomeness and, ultimately, suicide risk.

However, when examining the interaction between age and romantic identity, findings indicate that being aromantic and in the middle or older age category resulted in significantly lower odds of reporting suicidal ideation. This may stem from the fact that older asexual individuals are less susceptible to allonormative expectations and societal pressures pertaining to sexuality and the cultural embrace of sex positivity. For example, the nature of age-related sexual expectations may cause individuals in the younger age category to feel 'left behind' or that they are missing out because of their asexuality (MacNeela and Murphy, 2015). These feelings of being left out, combined with a desire to form romantic relationships, may further complicate interpersonal relationships with non-asexual people (Dawson et al., 2019; Vares, 2021) and lead to increased feelings of loneliness and poorer mental health outcomes (Carrigan, 2011; Foster et al., 2019; Kelleher and Murphy, 2022b). Finally, although no statistically significant interactions were found for suicidal behaviour, all variables, apart from the older age category, increased the odds of participants reporting suicidal behaviour. This increased likelihood of reporting suicidal behaviour may be interpreted through unique experiences of marginalisation and discrimination that stem from anti-asexual bias (Kelleher and Murphy, 2022b; MacInnis and Hodson, 2012; McInroy et al., 2022) and aligns with previous research surrounding the prevalence of suicidality among sexual minority groups (i.e., Ferlatte et al., 2018; Veenstra, 2011), as well as implications of minority stress theory (Meyer, 2003) and the IPTS (Joiner, 2005).

The findings detailed in this article have several policy and practice implications. Although the pathologisation of asexuality is particularly salient among healthcare providers (Flanagan and Peters, 2020), the prevalence of suicidality stemming from intersecting forms of stigma and societal pressures means that many asexual individuals may seek care from mental health services. Thus, efforts should be made to include information about asexual identities in healthcare education and ongoing diversity training to increase the sensitivity of healthcare practitioners (Flanagan and Peters, 2020). Training should include efforts to minimise bias against asexual individuals who present with mental health difficulties, avoid normative assumptions surrounding sex and sexuality and endorse reactions to disclosure that are positive and affirming (Flanagan and Peters, 2020; Herbitter et al., 2021). Furthermore, given the nuances that surround asexual individuals' risk of suicidal ideation and behaviours, clinicians should be encouraged to consider how other intersecting factors (e.g., age, race, gender, romantic identity) may interact with asexual individuals' identities and integrate this knowledge within the provision of services. Again, such efforts may derive from training programs for clinicians that generate core competencies in recognising and understanding the diversity that exists within the asexual community and subsequent variability in risk towards suicidal ideation and behaviours. Finally, in terms of healthcare policy, it is crucial to adopt an intersectional approach that incorporates the diverse experiences of asexual individuals within the design and development of suicide prevention strategies. Taking an intersectional approach will ensure that services are inclusive, equitable and responsive to the unique and intersecting challenges faced by asexual individuals.

6.1. Limitations and future recommendations

Participants included in this study were drawn from an online sample, specifically respondents of the 2020 Ace Community survey. Although this offered a large and relatively diverse sample, the online nature of data gathering presented some limitations. Specifically, this excluded asexual individuals who do not have access to the internet and limited the generalisability of findings to the wider asexual population. Therefore, future research should endeavour to better understand the suicidality correlates of asexual individuals who are not recruited through online forums and asexuality-specific communities. Although a diverse range of ages and races were included in this study, the sample was predominantly White, female and in the younger age category. Again, this limits the generalisability of findings to older asexual groups, men, BIPOC and non-binary/transgender individuals. Moreover, aggregating various racial identities into the category of BIPOC limited the intersectional contribution of this study and our understanding of other unique experiences of racism and marginalisation. Grouping participants for analysis also pertains to the aggregation of diverse gender and romantic identities within the categories of ‘gender nonbinary/trans’ and ‘romantic’. Thus, future research should over-sample asexual individuals of varying genders, romantic identities and races to better understand their vulnerability to suicidal ideation and behaviour more broadly. As the Ace Community Survey is cross-sectional in design, this limits our understanding of the causal and predictive interpretations of suicidality within the asexual community. To address this limitation, future research should focus on longitudinal analyses and track changes in suicidal ideation and behaviour in relation to various influencing factors over time. This may uncover specific causes and predictors of suicidality within the asexual community and, through this, develop more targeted interventions and support systems for asexual individuals. It is also important to note that other potentially relevant variables, such as current mental health disorders, were not assessed, which may provide a more comprehensive understanding of the relationship between asexuality and suicidality. Finally, the outcome variables of suicidal ideation and behaviour were drawn from a single question. Future studies would benefit from the use of standardised psychometric assessment of suicidality within this population.

6.2. Conclusion

This study addresses a critical gap in our understanding of suicidal ideations and behaviours that exists within the asexual community and extends upon research surrounding suicidality and intersectionality as well as cumulative experiences of invalidation, discrimination and social isolation. Although asexual individuals’ vulnerability to mental health difficulties has been examined in previous literature (Borgogna et al., 2019; McInroy et al., 2022; Yule et al., 2013), within-group differences surrounding suicidality has received little attention (Chan and Leung, 2023; Simon et al., 2022). An insufficient focus on distinctions among asexual individuals has resulted in a limited understanding of the variability that exists within the asexual community, as well as an absence of suicide prevention strategies and training programmes. Thus, by examining the presence of various intersecting identities among asexual individuals, this study emphasises how suicide prevention programmes may attend to multiple realms of social disadvantage, including race, age, gender and romantic identity. Moreover, this study contributes to growing research in the area of intersectionality and, specifically, the need for researchers to consider how multiple social identities may interact to impact the mental health and well-being of LGBTQ+ individuals.

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Sinéad Kelleher: Writing – original draft, Software, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Mike Murphy:** Writing – review & editing, Methodology.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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References

- Ace Community Survey Team, 2022. 2020 Ace Community Survey Summary Report. Ace Community Survey. <https://acecommunitysurvey.org/wp-content/uploads/2022/10/2020-Ace-Community-Survey-Summary-Report.pdf>.
- Balsam, K.F., Molina, Y., Beadnell, B., Simoni, J., Walters, K., 2011. Measuring multiple minority stress: the LGBT People of It's microaggressions scale. *Cult. Divers. Ethn. Minor. Psychol.* 17 (2), 163. <https://doi.org/10.1037/a0023244>.
- Barreto, L.T., Boislard, M.-A., 2023. The influence of shame in the psychological well-being of asexual people who experienced discrimination: a mediation model. *Can. J. Hum. Sex.* 32 (2), 164–177. <https://doi.org/10.3138/cjhs.2023-0015>.
- Bauer, G.R., Churchill, S.M., Mahendran, M., Walwyn, C., Lizotte, D., Villa-Rueda, A.A., 2021. Intersectionality in quantitative research: a systematic review of it's emergence and applications of theory and methods. *SSM – Popul. Health* 14, 100798. <https://doi.org/10.1016/j.ssmph.2021.100798>.
- Bogaert, A.F., 2012. Asexuality and autochorisexualism (identity-less sexuality). *Arch. Sex. Behav.* 41 (6), 1513–1514. <https://doi.org/10.1007/s10508-012-9963-1>.
- Bogaert, A.F., 2015. Asexuality: what it is and why it matters. *J. Sex. Res.* 52 (4), 362–379. <https://doi.org/10.1080/00224499.2015.1015713>.
- Boot-Haury, J., Brennan, J.M., Joseph, K.M., 2024. Asexual-affirming care: recommendations for practice. *J. Health Serv. Psychol.* 50 (3), 137–147. <https://doi.org/10.1007/s42843-024-00115-1>.
- Borgogna, N.C., McDermott, R.C., Aita, S.L., Kridel, M.M., 2019. Anxiety and depression across gender and sexual minorities: implications for transgender, gender nonconforming, pansexual, demisexual, asexual, queer, and questioning individuals. *Psychol. Sex. Orientat. Gend. Divers.* 6 (1), 54–63. <https://doi.org/10.1037/sgd0000306>.
- Brotto, L.A., Yule, M., 2017. Asexuality: sexual orientation, paraphilia, sexual dysfunction, or none of the above? *Arch. Sex. Behav.* 46 (3), 619–627. <https://doi.org/10.1007/s10508-016-0802-7>.
- Brown, S.J., 2022. Refusing Compulsory Sexuality: A Black Asexual Lens on Our Sex-Obsessed Culture. North Atlantic Books.
- Brunning, L., McKeever, N., 2021. Asexuality. *J. Appl. Philos.* 38 (3), 497–517. <https://doi.org/10.1111/japp.12472>.
- Carrigan, M., 2011. There's more to life than sex? Difference and commonality within the asexual community. *Sexualities* 14 (4), 462–478. <https://doi.org/10.1177/1363460711406462>.
- Catri, F., 2021. Defining asexuality as a sexual identity: lack/little sexual attraction, desire, interest and fantasies. *Sex. Cult.* 25 (4), 1529–1539. <https://doi.org/10.1007/s12119-021-09833-w>.
- Chan, R.C.H., Leung, J.S.Y., 2023. Experiences of minority stress and their impact on suicidality among asexual individuals. *J. Affect. Disord.* 325, 794–803. <https://doi.org/10.1016/j.jad.2023.01.025>.
- Chang, C.J., Dorrell, K.D., Feinstein, B.A., Depp, C.A., Ehret, B.C., Selby, E.A., 2023. Testing the interpersonal theory of suicide in a sample of sexual minority young adults: attention to within-group differences. *Suicide Life-Threat. Behav.* 53 (3), 415–425. <https://doi.org/10.1111/sltb.12952>.
- Chang, C.J., Feinstein, B.A., Fulginiti, A., Dyar, C., Selby, E.A., Goldbach, J.T., 2021. A longitudinal examination of the interpersonal theory of suicide for predicting suicidal ideation among LGBTQ+ youth who utilize crisis services: the moderating effect of gender. *Suicide Life-Threat. Behav.* 51 (5), 1015–1025. <https://doi.org/10.1111/sltb.12787>.
- Chasin, C.D., 2015. Making sense in and of the asexual community: navigating relationships and identities in a context of resistance: making sense of asexuality. *J. Community Appl. Soc. Psychol.* 25 (2), 167–180. <https://doi.org/10.1002/casp.2203>.
- Claes, L., Bouman, W.P., Witcomb, G., Thurston, M., Fernandez-Aranda, F., Arcelus, J., 2015. Non-suicidal self-injury in trans people: associations with psychological symptoms, victimization, interpersonal functioning, and perceived social support. *J. Sex. Med.* 12 (1), 168–179. <https://doi.org/10.1111/jsm.12711>.

- Copulsky, D., Hammack, P.L., 2021. Asexuality, graysexuality, and demisexuality: distinctions in desire, behavior, and identity. *J. Sex. Res.* 0 (0), 1–10. <https://doi.org/10.1080/00224499.2021.2012113>.
- Craig, S.L., Eaton, A.D., McNroy, L.B., Leung, V.W., Krishnan, S., 2021. Can social media participation enhance LGBTQ+ youth well-being? Development of the social media benefits scale. *7. Social Media + Society*, 2056305121988931.
- Crenshaw, K., 1991. Mapping the margins: intersectionality, identity politics, and violence against women of color. *Stanf. Law Rev.* 43 (6), 1241–1299. <https://doi.org/10.2307/1229039>.
- Dawson, M., Scott, S., McDonnell, L., 2019. Freedom and foreclosure: intimate consequences for asexual identities. *Fam. Relatsh. Soc.* 8 (1), 7–22. <https://doi.org/10.1332/204674317X15011694317558>.
- Decker, J.S., 2015. *The Invisible Orientation: An Introduction to Asexuality*. Next Generation Indie Book Awards Winner in LGBT *. Simon and Schuster.
- Diaz, R.M., Ayala, G., Bein, E., Henne, J., Marin, B.V., 2001. The impact of homophobia, poverty, and racism on the mental health of gay and bisexual Latino men: findings from 3 US cities. *Am. J. Public Health* 91 (6), 927.
- Dubrow, J., 2008. How can we account for intersectionality in quantitative analysis of survey data? Empirical illustration of Central and Eastern Europe. *Ask. Soc. Res. Methods* 17, 85–100.
- Ferlatte, O., Salway, T., Hankivsky, O., Trussler, T., Oliffe, J.L., Marchand, R., 2018. Recent suicide attempts across multiple social identities among gay and bisexual men: an intersectionality analysis. *J. Homosex.* 65 (11), 1507–1526. <https://doi.org/10.1080/00918369.2017.1377489>.
- Fink, B.N., 2023. Experiences of sexual violence and their associations with suicidal ideation and behavior in the past year: an analysis of adults from the 2021 Ace Community Survey. *J. Inj. Violence Res.* 15 (2), 147. <https://doi.org/10.5249/jivr.v15i2.1843>.
- Flanagan, S.K., Peters, H.J., 2020. Asexual-identified adults: interactions with healthcare practitioners. *Arch. Sex. Behav.* 49 (5), 1631–1643. <https://doi.org/10.1007/s10508-020-01670-6>.
- Forrest, L.N., Beccia, A.L., Exten, C., Gehman, S., Ansell, E.B., 2023. Intersectional prevalence of suicide ideation, plan, and attempt based on gender, sexual orientation, race and ethnicity, and rurality. *JAMA Psychiatry* 80 (10), 1037–1046. <https://doi.org/10.1001/jamapsychiatry.2023.2295>.
- Foster, A.B., Eklund, A., Brewster, M.E., Walker, A.D., Candon, E., 2019. Personal agency disavowed: identity construction in asexual women of color. *Psychol. Sex Orient. Gend. Divers* 6 (2), 127–137. <https://doi.org/10.1037/sgd0000310>.
- Frost, D.M., Hammack, P.L., Wilson, B.D.M., Russell, S.T., Lightfoot, M., Meyer, I.H., 2020. The qualitative interview in psychology and the study of social change: sexual identity development, minority stress, and health in the generations study. *Qual. Psychol.* 7 (3), 245–266. <https://doi.org/10.1037/qap0000148>.
- Greaves, L.M., Barlow, F.K., Huang, Y., Stronge, S., Fraser, G., Sibley, C.G., 2017. Asexual identity in a New Zealand national sample: demographics, well-being, and health. *Arch. Sex. Behav.* 46 (8), 2417–2427. <https://doi.org/10.1007/s10508-017-0977-6>.
- Gupta, K., 2017. And now I'm just different, but there's nothing actually wrong with me": asexual marginalization and resistance. *J. Homosex.* 64 (8), 991–1013. <https://doi.org/10.1080/00918369.2016.1236590>.
- Gupta, K., 2019. Gendering asexuality and asexualizing gender: a qualitative study exploring the intersections between gender and asexuality. *Sexualities* 22 (7–8), 1197–1216. <https://doi.org/10.1177/1363460718790890>.
- Guz, S., Hecht, H.K., Kattari, S.K., Gross, E.B., Ross, E., 2022. A Scoping review of empirical asexuality research in social science literature. *Arch. Sex. Behav.* 51 (4), 2135–2145. <https://doi.org/10.1007/s10508-022-02307-6>.
- Hammack, P.L., Frost, D.M., Hughes, S.D., 2019. Queer intimacies: a new paradigm for the study of relationship diversity. *J. Sex. Res.* 56 (4–5), 556–592. <https://doi.org/10.1080/00224499.2018.1531281>.
- Hendricks, M.L., Testa, R.J., 2012. A conceptual framework for clinical work with transgender and gender nonconforming clients: an adaptation of the Minority Stress Model. *Prof. Psychol.: Res. Pract.* 43 (5), 460.
- Herbitter, C., Vaughan, M.D., Pantalone, D.W., 2021. Mental health provider bias and clinical competence in addressing asexuality, consensual non-monogamy, and BDSM: a narrative review. *Sex. Relatsh. Ther.* 0 (0), 1–24. <https://doi.org/10.1080/14681994.2021.1969547>.
- Hill, A.O., Lyons, A., Power, J., Amos, N., Ferlatte, O., Jones, J., Carman, M., Bourne, A., 2022. Suicidal ideation and suicide attempts among lesbian, gay, bisexual, pansexual, queer, and asexual youth: differential impacts of sexual orientation, verbal, physical, or sexual harassment or assault, conversion practices, family or household religiosity, and school experience. *LGBT Health*. <https://doi.org/10.1089/lgbt.2021.0270>.
- Hoffarth, M.R., Drolet, C.E., Hodson, G., Hafer, C.L., 2016. Development and validation of the attitudes towards asexuals (ATA) scale. *Psychol. Sex.* 7 (2), 88–100. <https://doi.org/10.1080/19419899.2015.1050446>.
- Joiner, T.E., 2005. *Why People Die by Suicide*. Harvard University Press.
- Kelleher, S., Murphy, M., 2022a. The identity development and internalization of asexual orientation in women: an interpretative phenomenological analysis. *Sex. Relatsh. Ther.* 1–31. <https://doi.org/10.1080/14681994.2022.2031960>.
- Kelleher, S., & Murphy, M. (2022b). *Asexual Identity Development and Internalisation: A Thematic Analysis*. <https://www.tandfonline.com/doi/epub/10.1080/14681994.2022.2091127?needAccess=true>.
- Kelleher, S., Murphy, M., Su, X., 2022. Asexual identity development and internalisation: a scoping review of quantitative and qualitative evidence. *Psychol. Sex.* 0 (0), 1–28. <https://doi.org/10.1080/19419899.2022.2057867>.
- Kelleher, S., Murphy, M., Murphy, R., 2024. Variations in sexual identity milestones among asexual people. *Arch. Sex. Behav.* 1–13. <https://doi.org/10.1007/s10508-024-03031-z>.
- Klonsky, E.D., May, A.M., Saffer, B.Y., 2016. Suicide, suicide attempts, and suicidal ideation. *Annu. Rev. Clin. Psychol.* 12 (1), 307–330. <https://doi.org/10.1146/annurev-clinpsy-021815-093204>.
- Lea, T., de Wit, J., Reynolds, R., 2014. Minority stress in lesbian, gay, and bisexual young adults in Australia: associations with psychological distress, suicidality, and substance use. *Arch. Sex. Behav.* 43, 1571–1578. <https://doi.org/10.1007/s10508-014-0266-6>.
- Liang, Z., Chen, Y., 2024. An intersectional exploration of outness, encountered discrimination and violence, and non-suicidal self-injury among asexual youth across gender identities. *J. Youth. Adolesc.* 1–15. <https://doi.org/10.1007/s10964-024-01999-4>.
- Liu, R.T., Walsh, R.F.L., Sheehan, A.E., Cheek, S.M., Carter, S.M., 2020. Suicidal ideation and behavior among sexual minority and heterosexual youth: 1995–2017. *Pediatrics* 145 (3), e20192221. <https://doi.org/10.1542/peds.2019-2221>.
- Lucassen, M.F.G., Merry, S.N., Robinson, E.M., Denny, S., Clark, T., Ameratunga, S., Crengle, S., Rossen, F.V., 2011. Sexual attraction, depression, self-harm, suicidality and help-seeking behaviour in New Zealand secondary school students. *Aust. N. Z. J. Psychiatry* 45 (5), 376–383. <https://doi.org/10.3109/00048674.2011.559635>.
- Lyons, A., Hill, A.O., McNair, R., Carman, M., Morris, S., Bourne, A., 2022. Demographic and psychosocial factors associated with recent suicidal ideation and suicide attempts among lesbian, gay, bisexual, pansexual, queer, and asexual (LGBQ) people in Australia: correlates of suicidality among LGBQ Australians. *J. Affect. Disord.* 296, 522–531. <https://doi.org/10.1016/j.jad.2021.09.105>.
- MacInnis, C.C., Hodson, G., 2012. Intergroup bias toward “Group X”: evidence of prejudice, dehumanization, avoidance, and discrimination against asexuals. *Group Process. Intergr. Relat.* 15 (6), 725–743. <https://doi.org/10.1177/1368430212442419>.
- MacNeela, P., Murphy, A., 2015. Freedom, invisibility, and community: a qualitative study of self-identification with asexuality. *Arch. Sex. Behav.* 44 (3), 799–812. <https://doi.org/10.1007/s10508-014-0458-0>.
- Marshall, M.P., Dietz, L.J., Friedman, M.S., Stall, R., Smith, H.A., McGinley, J., Thoma, B. C., Murray, P.J., D’Augelli, A.R., Brent, D.A., 2011. Suicidality and depression disparities between sexual minority and heterosexual youth: a meta-analytic review. *J. Adolesc. Health: Off. Publ. Soc. Adolesc. Med.* 49 (2), 115–123. <https://doi.org/10.1016/j.jadohealth.2011.02.005>.
- Martos, A.J., Nezhad, S., Meyer, I.H., 2015. Variations in sexual identity milestones among lesbians, gay men, and bisexuals. *Sex. Res. Soc. Policy* 12 (1), 24–33. <https://doi.org/10.1007/s13178-014-0167-4>.
- Maxwell, D., 2017. *It's Not Just About Sex: Asexual Identity and Intimate Relationship Practices*. University of York [PhD]. <https://theses.whiterose.ac.uk/18006/>.
- McInroy, L.B., Beaujoulais, B., Leung, V.W.Y., Craig, S.L., Eaton, A.D., Austin, A., 2020. Comparing asexual and non-asexual sexual minority adolescents and young adults: stressors, suicidality and mental and behavioural health risk outcomes. *Psychol. Sex.* 1–17. <https://doi.org/10.1080/19419899.2020.1806103>.
- McInroy, L.B., Beaujoulais, B., Leung, V.W.Y., Craig, S.L., Eaton, A.D., Austin, A., 2022. Comparing asexual and non-asexual sexual minority adolescents and young adults: stressors, suicidality and mental and behavioural health risk outcomes. *Psychol. Sex.* 13 (2), 387–403. <https://doi.org/10.1080/19419899.2020.1806103>.
- Mereish, E.H., Katz-Wise, S.L., Woulfe, J., 2017. Bisexual-specific minority stressors, psychological distress, and suicidality in bisexual individuals: the mediating role of loneliness. *Prev. Sci.* 18 (6), 716–725. <https://doi.org/10.1007/s11211-017-0804-2>.
- Meyer, I.H., 2003. Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: conceptual issues and research evidence. *Psychol. Bull.* 129 (5), 674–697. <https://doi.org/10.1037/0033-2909.129.5.674>.
- Mollet, A.L., Black, W., 2023. Coercive rape tactics perpetrated against asexual college students: a quantitative analysis considering students' multiple identities. *J. Coll. Stud. Dev.* 64 (1), 96–101. <https://doi.org/10.1353/csd.2023.0004>.
- Nock, M.K., Borges, G., Bromet, E.J., Alonso, J., Angermeyer, M., Beautrais, A., Williams, D., 2008. Cross-national prevalence and risk factors for suicidal ideation, plans and attempts. *Br. J. Psychiatry* 192 (2), 98–105. <https://doi.org/10.1192/bjp.bp.107.040113>.
- O'Connor, R.C., Nock, M.K., 2014. The psychology of suicidal behaviour. *Lancet Psychiatry* 1 (1), 73–85.
- Owen, I.H. (2018). *Still, Nothing: Mammy and Black Asexual Possibility*. https://journals.sagepub.com/doi/full/10.1057/s41305-018-0140-9?casa_token=WljYqrXc8wAAAAA%3AD90VXNTitH8A4-MYH1x-TW9x9LX6sunJThCu-g8G1KdTy124KlxlwpKToUsNTtpb0MJVYmshvcw.
- Parmenter, J.G., Galliher, R.V., Yaeger, A.C., Maughan, A.D.A., 2022. Intersectionality and identity configurations: a qualitative study exploring sexual identity development among emerging adults within the United States. *Emerg. Adulthood* 10 (2), 372–385. <https://doi.org/10.1177/2167696820946597>.
- Phillip, A., Pellechi, A., DeSilva, R., Semler, K., Makani, R., 2022. A plausible explanation of increased suicidal behaviors among transgender youth based on the interpersonal theory of suicide (ITS): case series and literature review. *J. Psychiatr. Pr.* 28 (1), 3–13. <https://doi.org/10.1097/PRA.0000000000000604>.
- Prause, N., Graham, C.A., 2007. Asexuality: classification and characterization. *Arch. Sex. Behav.* 36 (3), 341–356. <https://doi.org/10.1007/s10508-006-9142-3>.
- Przybylo, E., 2013. Afterword: some thoughts on asexuality as an interdisciplinary method. *Psychol. Sex.* 4 (2), 193–194. <https://doi.org/10.1080/19419899.2013.774167>.
- Renteria, R., Benjet, C., Gutierrez-Garcia, R.A., Ramirez, A.A., Albor, Y., Borges, G., Mortier, P., 2021. Suicide thought and behaviors, non-suicidal self-injury, and perceived life stress among sexual minority Mexican college students. *J. Affect. Disord.* 281, 891–898. <https://doi.org/10.1016/j.jad.2020.11.038>.

- Robbins, N.K., Low, K.G., Query, A.N., 2016. A qualitative exploration of the “coming out” process for asexual individuals. *Arch. Sex. Behav.* 45 (3), 751–760. <https://doi.org/10.1007/s10508-015-0561-x>.
- Russell, S.T., Fish, J.N., 2016. Mental health in lesbian, gay, bisexual, and transgender (LGBT) youth. *Annu. Rev. Clin. Psychol.* 12 (1), 465–487. <https://doi.org/10.1146/annurev-clinpsy-021815-093153>.
- Ryan, C., Russell, S.T., Huebner, D., Diaz, R., Sanchez, J., 2010. Family acceptance in adolescence and the health of LGBT young adults. *J. Child Adolesc. Psychiatr. Nurs.* 23 (4), 205–213. <https://doi.org/10.1111/j.1744-6171.2010.00246.x>.
- Substance Abuse and Mental Health Services Administration, 2018. 2018 Methodological Summary and Definitions. U.S. Department of Health & Human Services. <https://www.samhsa.gov/data/data-we-collect/nsduh-national-survey-drug-use-and-health>.
- Scherrer, K.S., 2008. Coming to an Asexual identity: negotiating identity, negotiating desire. *Sexualities* 11 (5), 621–641. <https://doi.org/10.1177/1363460708094269>.
- Seelman, K.L., 2016. Transgender adults’ access to college bathrooms and housing and the relationship to suicidality. *J. Homosex.* 63 (10), 1378–1399. <https://doi.org/10.1080/00918369.2016.1157998>.
- Simon, K.A., Hawthorne, H.M., Clark, A.N., Renley, B.M., Farr, R.H., Eaton, L.A., Watson, R.J., 2022. Contextualizing the well-being of asexual youth: evidence of differences in family, health, and school outcomes. *J. Youth. Adolesc.* 51 (1), 128–140. <https://doi.org/10.1007/s10964-021-01500-5>.
- Stotzer, R.L., 2009. Violence against transgender people: a review of United States data. *Aggress. Violent. Behav.* 14 (3), 170–179. <https://doi.org/10.1016/j.avb.2009.01.006>.
- Sutter, M., Perrin, P.B., 2016. Discrimination, mental health, and suicidal ideation among LGBTQ people of color. *J. Couns. Psychol.* 63 (1), 98. <https://doi.org/10.1037/cou0000126>.
- Tabachnick, B.G., Fidell, L.S., Ullman, J.B., 2007. *Using multivariate statistics*, 5(7). Pearson, Boston, MA.
- Testa, R.J., Habarth, J., Peta, J., Balsam, K., Bockting, W., 2015. Development of the gender minority stress and resilience measure. *Psychol. Sex. Orient. Gend. Divers.* 2 (1), 65. <https://doi.org/10.1037/sgd0000081>.
- Testa, R.J., Michaels, M.S., Bliss, W., Rogers, M.L., Balsam, K.F., Joiner, T., 2017. Suicidal ideation in transgender people: gender minority stress and interpersonal theory factors. *J. Abnorm. Psychol.* 126 (1), 125. <https://doi.org/10.1037/abn0000234>.
- Turecki, G., Brent, D.A., 2016. Suicide and suicidal behaviour. *Lancet* 387 (10024), 1227–1239.
- Van Houdenhove, E., Gijls, L., T’Sjoen, G., Enzlin, P., 2015. Stories about asexuality: a qualitative study on asexual women. *J. Sex. Marital. Ther.* 41 (3), 262–281. <https://doi.org/10.1080/0092623X.2014.889053>.
- Vares, T., 2018. ‘My [asexuality] is playing hell with my dating life’: romantic identified asexuals negotiate the dating game. *Sexualities* 21 (4), 520–536. <https://doi.org/10.1177/1363460717716400>.
- Vares, T., 2021. Asexuals negotiate the ‘onslaught of the heteronormative. *Sexualities*. <https://doi.org/10.1177/1363460721993389>, 1363460721993389.
- Veenstra, G., 2011. Race, gender, class, and sexual orientation: intersecting axes of inequality and self-rated health in Canada. *Int. J. Equity Health* 10 (1), 3. <https://doi.org/10.1186/1475-9276-10-3>.
- Veldhuis, C.B., Drabble, L., Riggle, E.D., Wootton, A.R., Hughes, T.L., 2018. We won’t go back into the closet now without one hell of a fight”: effects of the 2016 presidential election on sexual minority women’s and gender minorities’ stigma-related concerns. *Sex. Res. Soc. Policy* 15, 12–24.
- Xu, Y., Ma, Y., Rahman, Q., 2023. Comparing asexual with heterosexual, bisexual, and gay/lesbian individuals in common mental health problems: a multivariate meta-analysis. *Clin. Psychol. Rev.* 105, 102334. <https://doi.org/10.1016/j.cpr.2023.102334>.
- Yule, M.A., Brotto, L.A., Gorzalka, B.B., 2013. Mental health and interpersonal functioning in self-identified asexual men and women. *Psychol. Sex.* 4 (2), 136–151. <https://doi.org/10.1080/19419899.2013.774162>.