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# Outness and social–emotional adjustment among asexual and demisexual adolescents

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## ABSTRACT

Adolescents who identify as asexual (i.e., do not experience sexual attraction) remain understudied despite a recent increase in studies carried out among asexual adults. The present study provides data on the frequency of asexual identities among adolescents with attention to diversity across the asexuality spectrum, including a focus on demisexual adolescents. We utilized a national sample of 17,112 LGBQA+ adolescents aged 13–17—of which 773 (4.5%) identified as asexual and 105 (0.6%) identified as demisexual. We compared those identifying as asexual and those identifying as demisexual on outness and social–emotional adjustment. In addition, we tested differences between asexual adolescents and allosexual sexual minority youth (SMY) on their sexual identity outness and social–emotional adjustment, and whether the associations differed by sexual identity. We found that asexual adolescents were out to significantly fewer people and experienced fewer depressive symptoms than demisexual adolescents. Asexual adolescents reported lower outness, greater depressive symptoms, and lower self-esteem compared to allosexual SMY. Greater outness was associated with higher self-esteem across asexual and allosexual SMY. These findings suggest increasing identification as asexual among youth compared to previous generations and point to greater social–emotional adjustment challenges for asexual compared with allosexual SMY.

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## Introduction

Adolescence is a period critical for identity development (Erikson, 1950), and this holds true for sexual identity development (Bishop et al., 2020; Dunlap, 2016; Martos et al., 2015). Adolescents and young adults who report more comfort with their sexual identity and earlier identity development milestones report better mental wellbeing, indicating that sexual identity development during adolescence impacts socio-emotional adjustment (Kosciw et al., 2015; Rosario et al., 2011). In addition, adolescence

is commonly the period when sexual minority people begin disclosing to others about their identity, a process called “coming out” (Bishop et al., 2020). The vast majority of research on sexual identity development among sexual minority youth (SMY) has concentrated on gay, lesbian, and bisexual youth, while other adolescents, including those who identify as asexual (i.e., do not experience sexual attraction), have been studied far less (Smith & Pitcher, 2022; Martos et al., 2015; Rosario et al., 2011). Given that asexual people typically do not experience sexual attraction, the social-emotional experiences and adjustment of asexual youth may differ in important ways compared to allosexual SMY. The current study utilizes a large national sample of LGBQA+ (lesbian, gay, bisexual, queer, asexual, and other sexual minority) youth to examine the prevalence of asexual identities among sexual minority youth, test whether outness (disclosure of sexual identity) and adjustment differ based on sexual identity, and investigate associations between outness and social-emotional well-being.

### ***Asexual identity***

Asexuality is characterized by a lack of sexual attraction to any gender and is unique in that it refers to degree of attraction, rather than the gender of the target of attraction (Copulsky and Hammack 2023). Although some studies have attempted to define asexuality based on sexual behavior, most research on asexuality as an orientation uses the sexual attraction-based definition to emphasize asexuality as a sexual identity rather than a choice to be celibate (Bogaert, 2015; Brotto & Yule, 2017). Research into asexuality as an identity proliferated following Bogaert’s (2004) work on asexual adults living in the United Kingdom. Up until that point, asexuality had primarily been perceived as a product of medical conditions or psychological problems or trauma and conflated with hypoactive sexual desire disorder (Beck, 1995). Although asexual identity has been almost exclusively studied in adults, retrospective narrative studies indicate that asexual adults often trace their asexual identity development back to adolescence when they either identified as asexual or, lacking the terminology to describe their experience, simply noticed they were “different” from their peers (Carrigan, 2011; Foster et al., 2019). Despite these findings, some researchers have elected to exclude asexual adolescents from their studies based on the presumption that these adolescents are likely “pre-sexual,” meaning they will grow into another identity later in life (Van Houdenhove et al., 2015).

Asexuality is considered a nontraditional sexual identity in that, similar to bisexuality, it does not align with a gay-straight binary (Brotto & Yule, 2017; Morandini et al., 2017). Previously, the prevalence of asexuality has been documented as approximately 1.66% of sexual minority adults

(Rothblum, 2020). We expect this percent to be higher among adolescents in the current study, given that nontraditional identities broadly are increasing in prevalence in the queer community, especially among young adults and adolescents (Morandini et al., 2017).

The asexual community also includes related emerging identities such as demisexuality and gray asexuality. Demisexual people do not experience sexual attraction until after a strong emotional bond has been established, and gray asexual people have either experienced sexual attraction in the past but not currently or experience sexual attraction extremely rarely (Brotto et al., 2010; Pinto, 2014). While demisexual people are considered part of the asexual spectrum, their experiences differ from other asexual people who do not experience sexual attraction under any circumstances; for example, research indicates asexual and demisexual adults differ on sexual and dating behavior (Copulsky & Hammack, 2023). Demisexuality has been a common write-in identity in studies of sexual minority young adults (Borgogna et al., 2019; Rothblum et al., 2020), but its prevalence among adolescents is unknown. The current study examines the prevalence of asexual and demisexual identities among adolescents.

### **Outness**

Adolescence is a vital time for sexual identity development, which can include milestones like self-realization of a minority sexual identity and first disclosure to a friend or family member (Bishop et al., 2020; Dunlap, 2016). Qualitative research among asexual adults found that some asexual people have little interest in being out about their asexual identity or feel that it is less important than their romantic identity (Carrigan, 2011). As such, it is possible that asexual adolescents are less concerned with coming out about their asexuality. However, it should also be noted that other narrative studies have found that many asexual adults report choosing to come out and experiencing identity denial and negativity from others about their identity (Robbins et al., 2016). Asexuality is a nontraditional sexual identity as it falls outside of a gay-straight dichotomy, and while identity denial is a common experience for sexual minority people in general, it may be especially salient for nontraditional sexual minorities (Garr-Schultz & Gardner, 2021). In addition to identity denial, asexual adults often have to contend with assumptions that their identity is a product of a physical or mental illness (Robbins et al. 2016). This pathologization often comes from both peers and medical practitioners (Flanagan & Peters, 2020). Considering that asexual adults and adolescents have to contend with these unique threats to their identity, we consider that asexual adolescents may be less likely to be out than their allosexual SMY peers. Notably, there is no existing quantitative research on the prevalence of

outness among asexual adolescents, and outness among asexual adolescents compared to their allosexual SMY peers has yet to be investigated. The current study fills this gap in the literature by investigating whether asexual youth are less likely to be out compared with allosexual SMY.

In addition, given the scarcity of research on demisexuality, whether demisexual youth are similar to asexual youth in terms of outness also is unknown. Although demisexuality is considered to be on the asexual spectrum, demisexual people sometimes experience sexual attraction whereas people identifying specifically as asexual do not (Copulsky & Hammack, 2023). Demisexual youth may disclose to others about their experiences of attraction, which may foster disclosure of their sexual identity. As such, demisexual youth may be more likely than asexual youth to be out. The current study tests this possibility.

### ***Mental health and associations with outness***

Research has documented greater mental health and well-being risk among SMY compared to heterosexual youth. For example, higher rates of depression have been reported among SMY compared to their straight peers (Marshall et al., 2013). In addition, sexual minority adolescents also face threats to their self-esteem in the school environment, where sexuality-based discrimination and bullying are associated with lower self-esteem (Russell et al., 2014; Taylor et al., 2022). Of particular interest to the current study, there is some evidence that adolescents with nontraditional sexual minority identities experience more social and emotional adjustment difficulties than gay or lesbian adolescents (Marshall et al., 2013; Simon et al., 2022), perhaps due to lack of acceptance and social support for SMY with nontraditional identities such as asexuality (Simon et al., 2022). Studies of asexual adults have noted higher rates of depression among asexual adults compared to allosexual adults (Antonsen et al., 2020; Carvalho et al., 2017). Demisexual people have been identified as a particularly at-risk group (Borgogna et al., 2019), though no research has investigated how demisexual and asexual youth compare in terms of social-emotional adjustment. The current study tests whether asexual youth report greater mental health difficulties (i.e., higher depressive symptoms, lower self-esteem) compared with allosexual SMY. We also compare asexual youth to demisexual youth.

Outness (disclosure of sexual identity) has been linked with social-emotional adjustment among SMY (e.g., Kosciw et al., 2015). Findings regarding the impact that being out has on mental health reveal both positive and negative effects. Coming out during adolescence can be affirming but also may pose risk for social and emotional well-being (Charbonnier & Graziani, 2016). Previous studies have found positive effects of outness on

adolescents' psychological well-being (Kavanaugh et al., 2020; Kosciw et al., 2015; Legate et al., 2012), but coming out also can put sexual minority adolescents at risk for greater victimization and harassment (Talbert, 2004), particularly when adolescents are selectively out to some people and not others (Watson et al., 2015). Chang et al. (2021) found that outness had an indirect effect on depression through facilitating social support. Whereas some research has found that greater outness is associated with better well-being outcomes across all sexual minority adolescents (Kosciw et al., 2015), others have found that being out may come at greater cost for emerging adults with nontraditional sexual identities (i.e., bisexual) compared with gay and lesbian emerging adults (Feinstein et al., 2022). It may be that outness is associated with more social-emotional adjustment difficulties especially for asexual adolescents compared to allosexual SMY, given that asexuality is a nontraditional identity that is uniquely distinct from other SMY identities in terms of lack of attraction. As such, asexual youth may face significant identity denial as well as pathologization, which may contribute to them benefiting less from coming out than their allosexual SMY peers. The current study tests whether outness is associated with depression and self-esteem, and whether these effects differ for asexual adolescents compared to allosexual sexual minority adolescents.

### ***Developmental considerations***

As noted, adolescence is an important developmental period for sexual identity development (e.g., Bishop et al., 2020). Research among adolescents and emerging adults indicates that outness increases with age (Feinstein et al., 2022). Youths may become increasingly comfortable disclosing their sexual identity as they develop understanding of their identity across adolescence. It also is possible that across adolescence, youths are increasingly motivated to disclose their sexual identity in light of growing peer pressure to engage in romantic relationships, as is considered normative during this developmental period (Collins et al., 2009). In addition, age may impact the relation between outness and well-being. For example, Feinstein et al. (2022) found that greater outness was linked to increased suicidality among adolescents but not emerging adults. In the current study, we consider age differences in outness and examine whether age moderates associations between outness and mental health.

### ***The current study***

In sum, the current study seeks to fill an important gap in the literature on SMY by investigating the prevalence of asexual identities among adolescents and examining asexual adolescents' outness and mental health. In

the current study, we consider demisexual adolescents as a separate group from asexual youth and compare asexual adolescents to both demisexual and allosexual SMY. We expect that the prevalence of asexual identities among adolescents in the current study will be greater than has been previously recorded among adults (i.e., 1.66%; Rothblum, 2020). Furthermore, we hypothesize that asexual adolescents will report lower outness and greater mental health difficulties (i.e., lower self-esteem, higher depression) than allosexual SMY. We also examine whether asexual and allosexual SMY differ on age. In comparing asexual and demisexual youth, we hypothesize that asexual youth will report lower outness compared with demisexual youth. We conduct exploratory analyses to compare asexual and demisexual youth on self-esteem and depression, as well as on age. In addition to mean-level differences, we examine the associations of outness with self-esteem and depression and test whether these relations differ for asexual youth compared to allosexual SMY. We predict that greater outness will be associated with better mental health for allosexual SMY but worse mental health for asexual adolescents.

## Methods

### *Participants and procedure*

We utilized a sample of 17,112 LGBQA+ adolescents between the ages of 13 and 17 ( $M=15.57$ ,  $SD=1.27$ ) who completed the LGBTQ National Teen Survey between April and December 2017. The participants were adolescents in the United States, and all 50 states were represented in the sample. In the sample, 1,284 (7.5%) were thirteen years old, 2,542 (14.9%) were fourteen years old, 3,594 (21.0%) were fifteen years old, 4,481 (26.2%) were sixteen years old, and 5,211 (30.4%) were seventeen years old. Adolescents were recruited via social media posts, as well as through a large community organization's—Human Rights Campaign's (HRC)—website and email outreach (Watson et al., 2020). Of the adolescents in the overall sample, 773 (4.5%) identified as asexual, 105 identified as demisexual (0.6%), 6,401 (37.4%) identified as gay or lesbian, and 5,970 (34.9%) identified as bisexual. The rest of the sample reported being straight, queer, pansexual, questioning, or selected "other" and wrote-in multiple identities or another identity that was not listed for selection. The sample included 10,323 (62.5%) white, 964 (6.0%) Black, 104 (0.6%) Native American, 696 (4.1%) Asian, 1,880 (11.2%) Hispanic/Latinx, and 2,309 (13.4%) bi/multi-racial adolescents, as well as 237 (1.4%) participants who reported their racial and ethnic identity as other. Participants who completed the demographic portion of the survey but did not answer the questions of interest for this study were included in frequency analyses in order to capture the

diversity of sexual identities among adolescents but were excluded from further analyses.

Participating adolescents accessed the survey on Qualtrics where they were given information on the contents of the survey and informed that their responses would be kept anonymous. Participants were given the option to skip any questions they did not want to answer. All participants could enter a raffle to receive one of several Amazon gift cards.

## **Measures**

### ***Sexual identity***

Participants self-reported their sexual identities, starting with choosing between gay/lesbian, bisexual, queer, asexual, pansexual, questioning, and other. Participants who selected “other” were prompted to write in their sexual identity. “Other” responses were examined and asexual write-in identities were identified. Participants who wrote in “asexual” or “demisexual” were coded as such. Participants who wrote asexual identities other than asexuality or demisexuality fell into one of the following categories: “gray-asexual,” “asexual and other,” “asexual questioning,” or “other asexual identity,” all of whom were included in frequency analyses but excluded from all other analyses. Demisexual participants were grouped separately from asexual participants and were excluded from analyses comparing asexual and allosexual groups. All youth who reported any non-asexual sexual minority identity were combined into a single allosexual group for analyses.

### ***Sexual identity outness***

The Outness Inventory Scale (Mohr & Fassinger, 2000) assessed sexual identity outness using 12 items referencing outness to different social groups (family members/parents, siblings, extended family/grandparents, LGBTQ friends, non-LGBTQ friends, classmates at school, coworkers, teachers/adults at school, coaches, religious community, strangers/acquaintances, doctors). Participants reported how many people in each group they were out to about their sexual identity with responses ranging from 0 (none) to 4 (all). Total outness was calculated as the mean of all outness items, with higher scores indicating more outness. The scale had good reliability ( $\alpha$ : .86). In our sample, 4,261 completed the outness measure.

### ***Self-esteem***

Participants completed the Rosenberg Self-Esteem Scale (Rosenberg, 1965), an 18-item self-report scale with statements such as “I feel that I’m a person of worth, at least on an equal plane with others.” Responses ranged



from 1 (strongly disagree) to 4 (strongly agree), with some questions being reverse-coded. Total self-esteem scores were calculated by taking the mean of responses to all 18 questions. Higher scores indicated higher self-esteem. The scale had excellent reliability in this sample ( $\alpha$ : .92). In this sample, 11,510 completed the self-esteem measure.

### **Depression**

Kutcher's Adolescent Depression Scale (LeBlanc et al., 2002) was used to assess participants' reported symptoms of depression. Questions about suicidality were excluded for this study. Participants reported how often they experienced symptoms such as feeling worthlessness, hopelessness, or sadness using a scale from 0 (hardly ever) to 3 (all of the time). The scale had a Cronbach's  $\alpha$  of .90. In this sample, 11,095 participants completed the depression measure.

### **Analytical procedures**

All statistical analyses were carried out using IBM SPSS Statistics version 28.0. First, we ran a chi-square test for equality of proportions comparing the proportion of asexual adolescents in our sample compared to the proportion found in Rothblum et al. (2020). Then, frequencies were computed for asexual spectrum identities. Next,  $t$  tests were conducted comparing asexual and demisexual adolescents on outness and mental health. Then,  $t$  tests were run to compare asexual and allosexual SMY on outness and mental health. For both sets of analyses,  $t$  tests were carried out with a Bonferroni adjusted  $\alpha$  level of .025 (.05/2). Finally, hierarchical regression analyses controlling for age examined associations between outness and mental health and whether the relations were moderated by sexual identity or age.

## **Results**

### **Proportion of asexual adolescents**

The results of our chi-square test for equality of proportions indicated that our study had a significantly larger proportion of asexual youth in our sexual minority sample compared to Rothblum et al., 2020 ( $X^2$  (1,  $N=18,635$ ) = 36.74,  $p < .001$ ). However, the magnitude of this effect was quite small (Cramer's  $V = .05$ ).

### **Frequencies for asexual identities**

When asked to describe their sexual identity, 933 (5.5% of full sample) participants selected asexual or selected "other" and wrote-in an asexual

identity. Of those 933 participants, 773 identified as asexual (4.5% of the full sample). The second most common asexual identity was demisexual, with 109 (0.6% of the full sample) identifying as demisexual. The other asexual identities included gray-asexual and asexual combined with another sexual identity. The frequencies of these identities within the asexual sample are listed in Table 1.

**Group differences between asexual and demisexual youth**

The results of the *t* tests comparing asexual and demisexual youth are reported in Table 2. Demisexual youth reported being out to significantly more people than asexual youth. Demisexual youth also reported lower self-esteem than asexual youth. Demisexual youth and asexual youth did not differ significantly on depression or age.

**Group differences between asexual and allosexual sexual minority youth**

The results of the *t* tests comparing asexual and allosexual SMY are reported in Table 3. Consistent with our hypothesis, asexual youth reported being out to significantly fewer people than allosexual SMY. Also as hypothesized, asexual youth reported significantly lower self-esteem than allosexual SMY. Further in line with our hypothesis, asexual youth reported significantly higher rates of depressive symptoms than allosexual SMY. Finally, asexual and allosexual SMY did not differ significantly on age.

**Table 1.** Frequency of reported asexual spectrum identities.

	<i>N</i>	% of asexual sample
Asexual	773	82.3%
Demisexual	109	11.7%
Gray Asexual	22	2.4%
Asexual + other	22	2.4%
Asexual questioning	4	0.4%
Other identity	3	0.3%

Note. *N* = 933.

**Table 2.** Results from independent samples *T* tests comparing asexual and demisexual participants on outness, self-esteem, depression & age.

	Asexual participants		Demisexual participants		t test		Effect size
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>d</i>
Outness	0.96	0.96	1.27	0.65	-4.34**	707	-.50
Self-esteem	1.33	0.52	1.18	0.49	2.28*	662	.27
Depression	1.48	0.73	1.64	0.72	-1.78	673	
Age	15.60	1.25	15.44	1.17	1.17	871	

Note. \**p* < .05, \*\**p* < .01.

**Table 3.** Results from independent samples *T* tests comparing asexual and allosexual participants on outness, self-esteem, depression & age.

	Asexual participants		Allosexual participants		t test		Effect size
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>d</i>
Outness	0.96	0.96	1.26	0.79	11.65***	742.79	.39
Self-esteem	1.33	1.18	1.50	0.55	7.74*	662.47	.31
Depression	1.48	0.73	1.33	0.72	-5.10**	10,998	-.22
Age	15.60	15.44	15.57	1.27	-.520	16,994	-.02

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

**Table 4.** Hierarchical regression results predicting self-esteem from age, outness & asexuality.

Variable	<i>B</i>	<i>SE B</i>	$\beta$	<i>R</i> <sup>2</sup>	<i>R</i> <sup>2</sup> $\Delta$
<i>Step 1</i>				.008	
Age	.052	.009	.091***		
<i>Step 2</i>				.020	.012
Age	.045	.009	.080***		
Outness	.045	.010	.081***		
Asexuality	-.031	.008	-.060***		
<i>Step 3</i>				.020	.000
Age	.045	.009	.080***		
Outness	.045	.010	.081***		
Asexuality	-.039	.010	-.076**		
Outness $\times$ Age	-.019	.014	-.027		
Outness $\times$ Asexuality	.008	.010	.014		

Note.  $N = 3913$ ; \*\* $p < .01$ , \*\*\* $p < .001$ .

### Associations between outness and mental health

Hierarchical linear regression analyses controlling for age were carried out to investigate the relation between outness and self-esteem, as well as the association between outness and depression, and whether these associations were moderated by sexual identity. In the first model, age, outness, asexuality, the interaction between outness and asexuality, and the interaction between outness and age were entered as predictors of self-esteem. A parallel model was carried out with depression as the outcome variable.

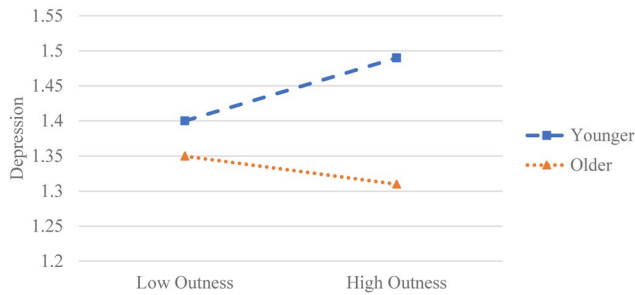
Results for the model involving self-esteem are reported in [Table 4](#). Age was a significant predictor of self-esteem such that older participants reported higher self-esteem. Both outness and asexuality were significantly associated with self-esteem. Participants who reported more outness reported higher self-esteem. Asexual identity was associated with lower self-esteem. Contrary to our prediction that asexual youth would benefit significantly less from outness compared to allosexual SMY, the interaction between outness and sexual identity was not significant. This indicates that the effect of outness on self-esteem did not differ for asexual participants compared to their allosexual SMY peers. There was also no significant interaction between outness and age in predicting self-esteem.

Results from the regression model predicting depressive symptoms are reported in [Table 5](#). Age was a significant predictor of depression such

**Table 5.** Hierarchical regression results predicting depression from age, outness & asexuality.

Variable	<i>B</i>	<i>SE B</i>	$\beta$	<i>R</i> <sup>2</sup>	<i>R</i> <sup>2</sup> $\Delta$
<i>Step 1</i>				.003	
Age	-.047	.013	-.060***		
<i>Step 2</i>				.005	.002
Age	-.048	.013	-.062***		
Outness	.005	.013	-.007		
Asexuality	.035	.012	.049**		
<i>Step 3</i>				.006	.001
Age	-.051	.013	-.066***		
Outness	.014	.014	.018		
Asexuality	.041	.015	.059**		
Outness $\times$ Age	-.029	.014	-.035*		
Outness $\times$ Asexuality	.015	.020	.016		

Note. *N* = 3,633; \**p* < .05, \*\**p* < .01, \*\*\**p* < .001.



**Figure 1.** Moderation effect of age on the association of outness and depression.

that older age was associated with lower depression. Asexuality was associated with greater depressive symptoms. Contrary to our prediction, outness did not predict depression. In addition, outness and asexuality did not have a significant interactive effect on depression. The interaction between age and outness in predicting depression was statistically significant. Simple slope analyses were performed to probe the interaction. Greater outness predicted higher depression only among younger (–1 SD) adolescents, *SPE* = 0.062, *t* = 2.214, *p* = .027. This effect was not significant for older (+1 SD) adolescents, *SPE* = –0.018, *t* = –.831, *p* = .406. A graph of the interaction is presented in *Figure 1*.

## Discussion

Despite nearly two decades of consistent research on asexuality as a minority sexual identity among adults, scant few studies have focused on asexual adolescents (McInroy et al., 2022; Simon et al., 2022). The current research examines asexual youths’ outness and social–emotional adjustment and offers several novel contributions. This study provides new information about the prevalence of diverse asexual identities among a national sample of adolescents. Ours is the first quantitative investigation of outness among

asexual youth. In addition, this study is the first to examine the differences between asexual and demisexual adolescents. The research also tests differences between asexual and allosexual SMY. Furthermore, we examined the associations between outness and mental health (i.e., self-esteem and depression) and whether these effects differed for asexual adolescents compared with their allosexual SMY peers.

In regards to the prevalence of asexual identities, past research among adult samples indicates that asexual adults comprise approximately 1.66% of sexual minority adults (Rothblum et al., 2020). Given the rise in non-traditional (i.e., not gay/lesbian or straight) sexual identities, particularly among young people (White et al., 2018), we predicted that the prevalence of asexual identities in our adolescent sample would be greater than that observed in previous adult samples. We found that 4.5% of our sample identified as exclusively asexual, significantly more than has been found in previous research among adults (Rothblum et al., 2020). The magnitude of the effect was quite small, but the growing number of individuals identifying as asexual is in line with greater prevalence of nontraditional sexual minority label use among younger people (Morandini et al., 2017). A total of 5.5% of adolescents in our sample identified as asexual or an identity that falls on the broader spectrum of asexuality. Descriptive information from our study highlights diversity among asexual adolescents, in that nearly 18% of asexual participants described their sexual identity using a label other than simply “asexual” that is on the asexuality spectrum (e.g., demisexual or gray-asexual) or identified as asexual and another identity. Of note, nearly 12% of the asexual adolescents in our study identified as demisexual. Demisexuality also was identified as a common write-in identity in a recent study of young adults in college (Borgogna et al., 2019). Our study provides further evidence of the growing number of young people identifying as asexual and demisexual. Increasing the attention paid to asexual identities among adolescents will help future research to be more inclusive of diverse sexual identities.

Moreover, we found significant differences between asexual youth and demisexual youth in social–emotional adjustment. Specifically, we found that demisexual adolescents reported greater outness than asexual adolescents. Because demisexual youth sometimes experience attraction (Copulsky & Hammack, 2023), they may be more likely to be out, and youth in general may be more likely to disclose about the presence of attraction than the lack of attraction. Although outness can be beneficial for psychological adjustment, it also can confer risk (Legate et al., 2012). As observed in the current study, demisexual youth were more likely to be out but also reported lower self-esteem compared with asexual youth. Past research among young adults has indicated that demisexual people may be at greater risk for depression and anxiety compared to individuals

with other sexual identities (Borgogna et al., 2019). Although we did not find a significant effect for depression in our study, the current finding for self-esteem is in line with this past work indicating that demisexual individuals may face particular threats to well-being.

The current research considered whether lack of sexual attraction among asexual adolescents may mean that they are less likely to be out compared to SMY who do experience attraction. Consistent with our hypothesis, we found that asexual youth reported being out to significantly fewer people than allosexual SMY. Our findings are in line with studies that indicate lower levels of outness among asexual adults (Mollet, 2020). Whether asexual adolescents report lower outness due to fear of negative reactions (see Robbins et al., 2016) or due to lack of interest in being out (see Carrigan, 2011) remains to be investigated. Qualitative research on asexual youths' decisions about whether to come out and how they go about the process is needed to further investigate these possibilities.

In addition, we compared asexual and allosexual SMY on well-being. As hypothesized, asexual youth reported higher depression and lower self-esteem than allosexual SMY. Studies on asexual adults' depression symptoms have reported similar differences, which may be linked to lack of awareness of asexual identity among non-asexual people as well as experiences with anti-asexual bias (Borgogna et al., 2019; Carvalho et al., 2017; MacInnis & Hodson, 2012). Asexual youth may face elevated rates of identity denial if their peers dismiss their lack of attraction as confusion or immaturity, and sexual identity denial is linked to worse mental health outcomes (Garr-Schultz & Gardner, 2021). Asexual adolescents also may be susceptible to social comparisons with allosexual SMY peers who show more interest in dating, which is generally considered normative during adolescence (Collins et al., 2009), and these social comparisons in turn may negatively impact mental health. Future research should examine such potential mechanisms that may help to explain asexual adolescents' greater vulnerability compared to other SMY.

We examined associations between outness and mental health, and whether outness was differentially associated with mental health for asexual compared to allosexual SMY. Our study indicated that outness predicted self-esteem, such that adolescents who reported being out to more people tended to report higher self-esteem, and this finding is similar to other studies on the impact of outness on self-esteem among SMY (Kosciw et al., 2015). Contrary to our hypothesis, this effect did not differ for asexual versus allosexual SMY. This may indicate that asexual youth who choose to come out benefit from outness similarly to other SMY. It should be noted that we did not determine the directionality of this effect. An alternate possibility is that adolescents who already have high self-esteem may be more likely to come out to more people than adolescents with low self-esteem.

Furthermore, demisexual youth provided a counterpoint to these findings because they were both out to more people and had lower self-esteem than asexual youth. Supplemental analyses revealed a negative correlation ( $r(32) = -.36$ ) between outness and self-esteem in the demisexual sample only. Further research should continue to probe why and for whom outness may positively impact self-esteem and whether this effect is bidirectional.

In terms of associations between outness and depression, contrary to our hypothesis, our findings did not indicate that outness was less protective against depression for asexual youth compared to allosexual SMY. Given that some research has pointed to challenges of outness for depression and anxiety related to minority stressors (Frost et al., 2015), it may be that additional factors not directly assessed in the current study, such as experiences of harassment and victimization, may be stronger determinants of whether outness is beneficial or harmful for mental health rather than asexuality per se. Interestingly, we found that age moderated the effect of outness on depression, such that greater outness was associated with more depressive symptoms only for younger, but not older, youth. One possible explanation is that outness is linked to a greater risk of victimization, and early adolescence appears to be a time of greater susceptibility to negative mental health outcomes linked to victimization (Fedewa & Ahn, 2011; Russell et al., 2014).

Additional exploratory analyses were carried out on age differences in outness, self-esteem and depression. Consistent with previous research (Feinstein et al., 2022), we found that older participants were out to more people. Although one previous study found that mental wellbeing among sexual minority adolescents plateaus or worsens as they age (Marshal et al., 2013), the older youth in our sample reported higher self-esteem and lower depressive symptoms than younger participants. Older adolescents may have more autonomy over who they choose to associate with and can thus more easily seek out supportive peers, which is a major contributor to overall mental wellbeing for sexual minority youth (Taylor et al., 2022).

Although this study offers new insights into several facets of asexual adolescents' experiences, limitations of the work are of note. This study did not differentiate between romantic and sexual attraction. Research indicates that many asexual adults report experiencing romantic attraction to a variety of genders despite a lack of sexual attraction (Antonsen et al., 2020; Bogaert, 2015). Asexual people may identify according to both their romantic and sexual identities, and may for example describe themselves as "homoromantic asexual," "biromantic asexual," "heteroromantic asexual" or any other romantic identity in conjunction with asexuality. Romantic attraction also may relate to levels of social support and adjustment among SMY. Asexual youth who experience romantic attraction may be afforded psychologically protective social support in romantic relationships (e.g.,

see Whitton et al., 2018) that is not available to aromantic asexual adolescents. However, asexual adults have indicated that they often struggle to find and maintain romantic relationships, especially with non-asexual people (Scherrer, 2008), so it is possible that asexual youth who experience romantic attraction may face difficulties in romantic relationships that other SMY do not. Future research should investigate romantic attraction within the asexual community and among other sexual minorities. On a related note, the study utilized a forced-choice measure for sexual identity. As a result, we may have underestimated the number of asexual participants in the sample if participants chose to select their romantic identity without the option for multiple identities, especially if participants were concerned about the invalidation of asexual identities. Of note, some participants did select “other” and wrote in asexual along with another identity. Further research should allow participants to differentiate sexual and romantic identity in order to more accurately reflect this diversity. Additionally, our study was not longitudinal and did not determine the direction of effects. Further research on asexual adolescents should employ a longitudinal design and examine potential changes in asexual identity over time. Such work will help to address previous claims that asexual youth are presexual and will come to identify differently with maturation (Van Houdenhove et al., 2015).

Future research examining intersectionality with gender identity and race will help provide a fuller picture of asexual and other SMY’s social and emotional experiences. Previous research has found that transgender asexual youth fare worse than cisgender asexual adolescents in terms of well-being (Simon et al., 2022). Considering the role of gender identity in conjunction with romantic identity may offer new insights into variability in asexual adolescents’ outness and mental health. Although we did not include race in analyses presented in this study, we ran supplemental analyses testing racial differences among asexual youth in our study variables and found no difference in outness, nor was race associated with outness in predicting wellbeing outcomes. However, in the current sample, racial minority adolescents were underrepresented and there may be relevant marginalization experiences affecting racial and ethnic minority adolescents who identify as asexual that were not assessed in our study but that can be addressed in future research.

This study has important implications for clinicians working with asexual and demisexual adolescents. Therapists and doctors should be aware of these youths’ elevated risk of mental health difficulties but also should avoid pathologizing asexuality itself. Several studies indicate that asexuality is not a side effect of mental or physical illness, but a sexual identity that should be recognized and accepted in treating asexual individuals (Bogaert, 2004; Brown et al., 2021; Scott et al., 2016). The pathologizing of asexuality by medical practitioners has been noted by asexual adults in narrative research,



which may make asexual people less likely to seek out mental health services in order to avoid identity denial (Scherrer, 2008). When SMY receive care from therapists who affirm their identity, they report better mental health outcomes (Painter et al., 2018). Based on the current finding that asexual youth are less likely than their allosexual sexual minority peers to be out, asexual youth who wish to come out may especially benefit from support aimed at helping them navigate the coming out process.

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### References

- Antonsen, A. N., Zdaniuk, B., Yule, M., & Brotto, L. A. (2020). Ace and aro: Understanding differences in romantic attractions among persons identifying as asexual. *Archives of Sexual Behavior, 49*(5), 1615–1630. <https://doi.org/10.1007/s10508-019-01600-1>
- Beck, J. G. (1995). Hypoactive sexual desire disorder: An overview. *Journal of Consulting and Clinical Psychology, 63*(6), 919–927. <https://doi.org/10.1037//0022-006x.63.6.919>
- Bishop, M. D., Fish, J. N., Hammack, P. L., & Russell, S. T. (2020). Sexual identity development milestones in three generations of sexual minority people: A national probability sample. *Developmental Psychology, 56*(11), 2177–2193. <https://doi.org/10.1037/dev0001105>

- Bogaert, A. F. (2004). Asexuality: Prevalence and associated factors in a national probability sample. *Journal of Sex Research, 41*(3), 279–287. <https://doi.org/10.1080/00224490409552235>
- Bogaert, A. F. (2015). Asexuality: What it is and why it matters. *Journal of Sex Research, 52*(4), 362–379. <https://doi.org/10.1080/00224499.2015.1015713>
- 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. *Psychology of Sexual Orientation and Gender Diversity, 6*(1), 54–63. <https://doi.org/10.1037/sgd0000306>
- Brotto, L. A., Knudson, G., Inskip, J., Rhodes, K., & Erskine, Y. (2010). Asexuality: A mixed-methods approach. *Archives of Sexual Behavior, 39*(3), 599–618. <https://doi.org/10.1007/s10508-008-9434-x>
- Brotto, L. A., & Yule, M. (2017). Asexuality: Sexual orientation, paraphilia, sexual dysfunction, or none of the above? *Archives of Sexual Behavior, 46*(3), 619–627. <https://doi.org/10.1007/s10508-016-0802-7>
- Brown, N. B., Peragine, D., VanderLaan, D. P., Kingstone, A., & Brotto, L. A. (2021). Cognitive processing of sexual cues in asexual individuals and heterosexual women with desire/arousal difficulties. *PLoS One, 16*(5), e0251074. <https://doi.org/10.1371/journal.pone.0251074>
- 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>
- Carvalho, J., Lemos, D., & Nobre, P. J. (2017). Psychological features and sexual beliefs characterizing self-labeled asexual individuals. *Journal of Sex & Marital Therapy, 43*(6), 517–528. <https://doi.org/10.1080/0092623X.2016.1208696>
- Chang, C. J., Kellerman, J. K., Fehling, K. B., Feinstein, B. A., & Selby, E. A. (2021). The roles of discrimination and social support in the associations between outness and mental health outcomes among sexual minorities. *The American Journal of Orthopsychiatry, 91*(5), 607–616. <https://doi.org/10.1037/ort0000562>
- Charbonnier, E., & Graziani, P. (2016). The stress associated with the coming out process in the young adult population. *Journal of Gay & Lesbian Mental Health, 20*(4), 319–328. <https://doi.org/10.1080/19359705.2016.1182957>
- Collins, W. A., Welsh, D. P., & Furman, W. (2009). Adolescent romantic relationships. *Annual Review of Psychology, 60*, 631–652. <https://doi.org/10.1146/annurev.psych.60.110707.163459>
- Copulsky, D., & Hammack, P. L. (2023). Asexuality, graysexuality, and demisexuality: Distinctions in desire, behavior, and identity. *The Journal of Sex Research, 60*(2), 221–230. <https://doi.org/10.1080/00224499.2021.2012113>
- Dunlap, A. (2016). Changes in coming out milestones across five age cohorts. *Journal of Gay & Lesbian Social Services, 28*(1), 20–38. <https://doi.org/10.1080/10538720.2016.1124351>
- Erikson, E. H. (1950). *Childhood and society*. Norton.
- Fedewa, A. L., & Ahn, S. (2011). The effects of bullying and peer victimization on sexual-minority and heterosexual youths: A quantitative meta-analysis of the literature. *Journal of GLBT Family Studies, 7*(4), 398–418. <https://doi.org/10.1080/1550428X.2011.592968>
- Feinstein, B. A., Mereish, E. H., Mamey, M. R., Chang, C. J., & Goldbach, J. T. (2022). Age differences in the associations between outness and suicidality among LGBTQ+ Youth. *Archives of Suicide Research. https://doi.org/10.1080/13811118.2022.2066493*
- Flanagan, S. K., & Peters, H. J. (2020). Asexual-identified adults: Interactions with health-care practitioners. *Archives of Sexual Behavior, 49*(5), 1631–1643. <https://doi.org/10.1007/s10508-020-01670-6>
- Foster, A. B., Eklund, A., Brewster, M. E., Walker, A. D., & Candon, E. (2019). Personal agency disavowed: Identity construction in asexual women of color. *Psychology of Sexual Orientation and Gender Diversity, 6*(2), 127–137. <https://doi.org/10.1037/sgd0000310>

- Frost, D. M., Lehavot, K., & Meyer, I. H. (2015). Minority stress and physical health among sexual minority individuals. *Journal of Behavioral Medicine*, 38(1), 1–8. <https://doi.org/10.1007/s10865-013-9523-8>
- Garr-Schultz, A., & Gardner, W. (2021). It's just a phase: Identity denial experiences, self-concept clarity, and emotional well-being in bisexual individuals. *Self and Identity*, 20(4), 528–544. <https://doi.org/10.1080/15298868.2019.1625435>
- Kavanaugh, S. A., Taylor, A. B., Stuhlsatz, G. L., Neppl, T. K., & Lohman, B. J. (2020). Family and community support among sexual minorities of color: The role of sexual minority identity prominence and outness on psychological well-being. *Journal of GLBT Family Studies*, 16(1), 1–17. <https://doi.org/10.1080/1550428X.2019.1593279>
- Kosciw, J., Palmer, N., & Kull, R. (2015). Reflecting resiliency: Openness about sexual orientation and/or gender identity and its relationship to well-being and educational outcomes for LGBT students. *American Journal of Community Psychology*, 55(1-2), 167–178. <https://doi.org/10.1007/s10464-014-9642-6>
- LeBlanc, J. C., Almudevar, A., Brooks, S. J., & Kutcher, S. (2002). Screening for adolescent depression: Comparison of the Kutcher adolescent depression scale with the beck depression inventory. *Journal of Child and Adolescent Psychopharmacology*, 12(2), 113–126. <https://doi.org/10.1089/104454602760219153>
- Legate, N., Ryan, R. M., & Weinstein, N. (2012). Is coming out always a “Good thing”? Exploring the relations of autonomy support, outness, and wellness for lesbian, gay, and bisexual individuals. *Social Psychological and Personality Science*, 3(2), 145–152. <https://doi.org/10.1177/1948550611411929>
- MacInnis, C. C., & Hodson, G. (2012). Intergroup bias toward “Group X”: Evidence of prejudice, dehumanization, avoidance, and discrimination against asexuals. *Group Processes & Intergroup Relations*, 15(6), 725–743. <https://doi.org/10.1177/1368430212442419>
- Marshal, M., Dermody, S., Cheong, J., Burton, C., Friedman, M., Aranda, F., & Hughes, T. (2013). Trajectories of depressive symptoms and suicidality among heterosexual and sexual minority youth. *Journal of Youth and Adolescence*, 42(8), 1243–1256. <https://doi.org/10.1007/s10964-013-9970-0>
- Martos, A. J., Nezhad, S., & Meyer, I. H. (2015). Variations in sexual identity milestones among lesbians, gay men, and bisexuals. *Sexuality Research & Social Policy*, 12(1), 24–33. <https://doi.org/10.1007/s13178-014-0167-4>
- 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. *Psychology and Sexuality*, 13(2), 387–403. <https://doi.org/10.1080/19419899.2020.1806103>
- Mohr, J. J., & Fassinger, R. E. (2000). Measuring dimensions of lesbian and gay male experience. *Measurement and Evaluation in Counseling and Development*, 33(2), 66–90. <https://doi.org/10.1080/07481756.2000.12068999>
- Mollet, A. L. (2020). “I have a lot of feelings, just none in the genitalia region”: A grounded theory of asexual college students’ identity journeys. *Journal of College Student Development*, 61(2), 189–206. <https://doi.org/10.1353/csd.2020.0017>
- Morandini, J. S., Blaszczyński, A., & Dar-Nimrod, I. (2017). Who adopts queer and pansexual identities? *Journal of Sex Research*, 54(7), 911–922. <https://doi.org/10.1080/00224499.2016.1249332>
- Painter, K. R., Scannapieco, M., Blau, G., Andre, A., & Kohn, K. (2018). Improving the mental health outcomes of LGBTQ youth and young adults: A longitudinal study. *Journal of Social Service Research*, 44(2), 223–235. <https://doi.org/10.1080/01488376.2018.1441097>
- Pinto, S. A. (2014). ASEXUally: On being an ally to the asexual community. *Journal of LGBT Issues in Counseling*, 8(4), 331–343. <https://doi.org/10.1080/15538605.2014.960130>

- Robbins, N., Low, K., & Query, A. (2016). A qualitative exploration of the “Coming out” process for asexual individuals. *Archives of Sexual Behavior, 45*(3), 751–760. <https://doi.org/10.1007/s10508-015-0561-x>
- Rosario, M., Schrimshaw, E. W., & Hunter, J. (2011). Different patterns of sexual identity development over time: Implications for the psychological adjustment of lesbian, gay, and bisexual youths. *Journal of Sex Research, 48*(1), 3–15. <https://doi.org/10.1080/00224490903331067>
- Rosenberg, M. (1965). *Rosenberg Self-Esteem Scale (RSES)*. APA PsycTests.
- Rothblum, E. D., Krueger, E. A., Kittle, K. R., & Meyer, I. H. (2020). Asexual and non-asexual respondents from a U.S. population-based study of sexual minorities. *Archives of Sexual Behavior, 49*(2), 757–767. <https://doi.org/10.1007/s10508-019-01485-0>
- Russell, S. T., Toomey, R. B., Ryan, C., & Diaz, R. M. (2014). Being out at school: the implications for school victimization and young adult adjustment. *The American Journal of Orthopsychiatry, 84*(6), 635–643. <https://doi.org/10.1037/ort0000037>
- Scherrer, K. S. (2008). Coming to an asexual identity: Negotiating identity, negotiating desire. *Sexualities, 11*(5), 621–641. <https://doi.org/10.1177/1363460708094269>
- Scott, S., McDonnell, L., & Dawson, M. (2016). Stories of Non-Becoming: Non-Issues, Non-Events and Non-Identities in Asexual Lives. *Symbolic Interaction, 39*(2), 268–286. <https://doi.org/10.1002/symb.215>
- 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. *Journal of Youth and Adolescence, 51*(1), 128–140. <https://doi.org/10.1007/s10964-021-01500-5>
- Smith, R. L., & Pitcher, K. J. (2022). Peer experiences of LGBTQ youth. In B. Halpern-Felsher (Ed.), *Encyclopedia of child and adolescent health*. Elsevier. (pp. 118–129). <https://doi.org/10.1016/B978-0-12-818872-9.00066-2>
- Talbut, S. (2004). Constructions of LGBT youth: Opening up subject positions. *Theory into Practice, 43*(2), 116–121. [https://doi.org/10.1207/s15430421tip4302\\_4](https://doi.org/10.1207/s15430421tip4302_4)
- Taylor, K., Coulombe, S., Coleman, T. A., Cameron, R., Davis, C., Wilson, C. L., Woodford, M. R., & Travers, R. (2022). Social support, discrimination, and self-esteem in LGBTQ+ high school and post-secondary students. *Journal of LGBT Youth, 19*(3), 350–374. <https://doi.org/10.1080/19361653.2020.1812465>
- Van Houdenhove, E., Gijs, L., T’Sjoen, G., & Enzlin, P. (2015). Asexuality: A multidimensional approach. *Journal of Sex Research, 52*(6), 669–678. <https://doi.org/10.1080/00224499.2014.898015>
- Watson, R. J., Wheldon, C., & Puhl, R. M. (2020). Evidence of diverse identities in a large national sample of sexual and gender minority adolescents. *Journal of Research on Adolescence, 30*(Suppl 2), 431–442. <https://doi.org/10.1111/jora.12488>
- Watson, R. J., Wheldon, C. W., & Russell, S. T. (2015). How does sexual identity disclosure impact school experiences? *Journal of LGBT Youth, 12*(4), 385–396. <https://doi.org/10.1080/19361653.2015.1077764>
- White, A. E., Moeller, J., Ivcevic, Z., & Brackett, M. A. (2018). Gender identity and sexual identity labels used by U.S. high school students: A co-occurrence network analysis. *Psychology of Sexual Orientation and Gender Diversity, 5*(2), 243–252. <https://doi.org/10.1037/sgd0000266>
- Whitton, S. W., Dyar, C., Newcomb, M. E., & Mustanski, B. (2018). Romantic involvement: A protective factor for psychological health in racially-diverse young sexual minorities. *Journal of Abnormal Psychology, 127*(3), 265–275. <https://doi.org/10.1037/abn0000332>