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Sexual orientation among gender diverse youth

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Abstract

Purpose: Many youth are gender diverse (GDY), but our understanding of sexual orientation among GDY is limited. We sought to compare sexual identity, attraction, and contact between cisgender youth and GDY and to describe these characteristics across GDY subgroups.

Methods: We analyzed cross-sectional data from school-based surveys of 4,207 adolescents. Two-sample t-tests or chi-square tests compared characteristics between GDY and cisgender youth. Sexual attraction/contact were summarized with frequencies/proportions and stratified by transmasculine, transfeminine, and non-binary identities.

Results: 281 (9.1%) youth were GDY. Compared to cisgender peers, GDY were more likely to identify as sexual minority youth (SMY). 29.9% of GDY were transmasculine, 36.7% transfeminine, and 33.5% non-binary. Many transmasculine (45%) and transfeminine (58%) youth identified as heterosexual; most non-binary youth (91%) identified as SMY. For transgender youth identifying as heterosexual, sexual attraction/contact varied.

Conclusions: Aspects of sexuality among GDY remain complex, warranting individualized approaches to sexual/reproductive healthcare.

Keywords

gender identity; transgender persons; sexual behavior; sexual partners

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INTRODUCTION:

Gender diverse youth (GDY), referring to youth who identify as transmasculine, transfeminine, genderqueer, non-binary, or otherwise not-cisgender, comprise up to 10% of adolescents,¹ and providing comprehensive reproductive healthcare to this population remains a national focus.² Previous work has identified differences in sexual behaviors between GDY and their cisgender peers, including age at sexual initiation, condom use, and pregnancy prevention.³ GDY are also more likely to endorse a sexual minority identity, such as pansexual or queer.^{4,5} However, our understanding of all aspects of sexuality among GDY remains limited.⁶ In the present study, we sought to compare sexual orientation, including sexual identity, attraction, and contact, between cisgender youth and GDY. We also aimed to understand differences in these characteristics across GDY subgroups (transmasculine, transfeminine, and non-binary).

METHODS:

We analyzed cross-sectional data from school-based surveys administered to 4,207 9th-12th graders across 13 high schools in Pittsburgh, PA. A two-step gender identity question was used to identify GDY: 1) “What was your sex assigned at birth?” (“male” or “female”) and 2) “Which of the following best describes your gender identity?” (marking all that apply). Gender diversity was defined as an affirmative response to any of the following identities: “trans girl,” “trans boy,” “genderqueer,” “non-binary,” and “another identity.” Youth selecting multiple identities or youth for whom sex assigned at birth was incongruent with their reported gender identity were also coded as GDY. Youth indicated their sexual identity as: “asexual,” “bisexual,” “gay/lesbian,” “heterosexual,” “mostly heterosexual,” “queer,” or “not sure” (marking all that apply). We considered sexual minority youth (SMY) those who selected responses aside from only “heterosexual.” Sexual attraction and contact were assessed by asking respondents “Who are you sexually attracted to?” and “During your life, with whom have you had sexual contact?” (marking all that apply). Response options for both items included “boys,” “girls,” “transgender boys,” “transgender girls,” “genderqueer persons,” “persons with another identity,” “not sure,” (sexual attraction item only) and “non-binary persons” (sexual contact item only). Respondents could also select “I am not attracted to anybody” or “I have never had sexual contact.” Participants with completed responses for gender identity, sexual identity, sexual attraction, and sexual contact were included in analyses (N=3,097; 73.6% of all respondents). Two-sample t-tests or chi-square tests were used to compare characteristics between GDY and cisgender youth at a significance level of 0.05. Sexual attraction and contact were summarized with frequencies and proportions and stratified by transmasculine, transfeminine, and non-binary gender identities. All analyses were conducted in R version 4.0.4 (2021–02-15). This study was deemed exempt by the institutional review board.

RESULTS:

Among 3,097 youth, 281 (9.1%) identified as GDY (Table 1). Mean age among GDY was 15.6±1.4 years and 47.7% were assigned female sex at birth. 32.0% of GDY were non-Hispanic Black, 30.9% were non-Hispanic White, and 32.4% endorsed other racial/

ethnic identities. Compared to their cisgender peers, GDY were significantly more likely to identify as asexual, gay/lesbian, queer, or being unsure of their sexual identity ($p < 0.001$). A significantly greater proportion of GDY reported attraction to GDY, to multiple genders, or to nobody ($p < 0.001$). GDY were also more likely to report sexual contact with GDY ($p < 0.001$).

Among GDY, 29.9% identified as transmasculine, 36.7% as transfeminine, and 33.5% as non-binary (Table 2). Many transmasculine (45%) and transfeminine (58%) youth identified as heterosexual, whereas most non-binary youth (91%) identified as SMY. For transgender youth identifying as heterosexual, sexual attraction varied. For example, 53% of heterosexual-identifying transmasculine youth reported attraction to boys and 40% reported attraction to girls. Among heterosexual-identifying transfeminine youth, 18% reported attraction to boys and 40% to girls. Similar distributions were observed for sexual contact among these groups, though many GDY identifying as heterosexual reported never having sexual contact (49%). For GDY who identified as SMY, sexual behaviors were variable; many reported attraction to and contact with other GDY; notably, among 12 GDY who were asexual, 5 (42%) reported some form of sexual attraction/contact.

DISCUSSION:

GDY in our sample endorsed diverse sexual identities, including many who were SMY; however, many transmasculine and transfeminine youth identified as heterosexual with attraction to people of the same gender identity. This observation contrasts with other studies concerning transgender people's sexual orientations.⁴ Developmentally, attraction often develops before sexual identity, though there may be fluidity in this pattern.⁷ Sexual minority GDY reported varying sexual behaviors, and many had attraction to and contact with other GDY. Other research on sexuality among gender-diverse individuals has shown similar variability; however, most studies considered only one facet of sexuality, did not inquire about gender diverse partners, and focused on adults.⁶

Because of the cross-sectional nature of this study, we are unable to describe changes in gender identity or sexual orientation that may occur over time.⁸ Further, our survey assessed *current* sexual identity/attraction but *lifetime* sexual contact, and former sexual partners may not represent current sexual activity. SMY were thus defined according to their self-reported identity, since sexual contacts alone may not indicate a sexual minority status. GDY who identified as asexual were included with SMY in our sample, and several reported sexual attraction and contact; however, developing more inclusive survey items to assess perspectives on sexual and romantic relationships in this population remains an important focus. Finally, we defined GDY according to self-reported gender identity and sex assigned at birth, which does not incorporate youth with diverse gender expression.⁹

Our results highlight the complexity of sexual identity, attraction, and contact among GDY.¹⁰ Characteristics reported by GDY in our sample challenge traditional definitions of sexual identity, which often assume binarized gender constructs and heterosexual attraction/contact. Moreover, sexual contacts cannot be assumed from self-reported sexual identity or attraction. These findings are particularly salient given that such characteristics are

understudied among adolescents When caring for youth, especially GDY, clinicians must adopt a flexible approach that moves beyond societal norms of sexual identity, prompts reflection on assumptions and bias, and honors the unique experience of each young person, allowing for comprehensive sexual and reproductive healthcare for this population.

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Abbreviations:

GDY	Gender diverse youth
SMY	sexual minority youth

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IMPLICATIONS AND CONTRIBUTION

Many young people identify as gender diverse, and understanding their unique sexual health needs remains critical for adolescent providers. This study describes the complexity of sexual orientation among a school-based sample of gender diverse youth. Findings underscore the importance of individualized approaches to sexual and reproductive healthcare for this population.

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Table 1:
 Characteristics of Respondents, Youth Risk Behavior Survey (2018): Pittsburgh, PA

	Cisgender (n=2816)	Gender Diverse (n=281)	p-value ^a
Age: Mean (SD)	15.7 (1.2)	15.6 (1.4)	0.157
Sex Assigned at Birth: No. (%)			0.003
Female	1606 (57%)	134 (47.7%)	
Male	1210 (43%)	147 (52.3%)	
Race: No. (%)			< 0.001
American Indian/Alaska Native	25 (0.9%)	9 (3.2%)	
Asian	109 (3.9%)	11 (3.9%)	
Black or African American	901 (32%)	102 (36.3%)	
Native Hawaiian/Other Pacific Islander	11 (0.4%)	10 (3.6%)	
White	1254 (44.5%)	99 (35.2%)	
Multiracial/Other	495 (17.6%)	46 (16.4%)	
Ethnicity: No. (%)			0.002
Hispanic	237 (8.4%)	38 (13.5%)	
Not Hispanic	2529 (89.8%)	225 (80.1%)	
Sexual Identity: No. (%)			< 0.001
Asexual	25 (0.9%)	12 (4.3%)	
Bisexual	290 (10.3%)	28 (10%)	
Gay or Lesbian	93 (3.3%)	29 (10.3%)	
Heterosexual	2006 (71.2%)	106 (37.7%)	
Mostly Heterosexual	229 (8.1%)	30 (10.7%)	
Multiple	66 (2.3%)	33 (11.7%)	
Not sure	84 (3%)	23 (8.2%)	
Sexual Attraction: No. (%)			< 0.001
Boys	1090 (38.7%)	54 (19.2%)	
GDY ^b	8 (0.3%)	27 (9.6%)	
Girls	1107 (39.3%)	71 (25.3%)	
Multiple	411 (14.6%)	68 (24.2%)	
Nobody/Not Sure	200 (7.1%)	61 (21.7%)	
Sexual Contact: No. (%)			< 0.001
Boys	674 (23.9%)	48 (17.1%)	
GDY ^b	11 (0.4%)	36 (12.8%)	
Girls	762 (27.1%)	60 (21.4%)	
Multiple	186 (6.6%)	36 (12.8%)	
Nobody	1183 (42%)	101 (35.9%)	

^a p-value obtained from two-sample t-tests or chi-square tests

^b Gender diverse youth (GDY) = transgender boys, transgender girls, genderqueer, non-binary, or another identity

Table 2: Sexual Attraction and Contact by Self-Reported Sexual Identity among Gender Diverse Youth, Youth Risk Behavior Survey (2018): Pittsburgh, PA

	Transmasculine (n=84)		Transfeminine (n=103)		Non-Binary (n=94)	
	Heterosexual ^a (n=38)	Sexual Minority ^b (n=46)	Heterosexual (n=60)	Sexual Minority (n=43)	Heterosexual (n=8)	Sexual Minority (n=86)
Attraction: No. (%)						
Boys	20 (53%)	7 (15%)	11 (18%)	10 (23%)	1 (13%)	5 (6%)
GDY	1 (3%)	7 (15%)	1 (2%)	7 (16%)	0 (0%)	11 (14%)
Girls	15 (40%)	11 (24%)	24 (40%)	9 (21%)	4 (50%)	8 (10%)
Multiple	1 (3%)	11 (24%)	1 (2%)	9 (21%)	1 (13%)	45 (52%)
Nobody/Not Sure	1 (3%)	10 (22%)	23 (38%)	8 (19%)	2 (25%)	17 (21%)
Contact: No. (%)						
Boys	11 (29%)	7 (15%)	8 (13%)	13 (30%)	1 (13%)	8 (9%)
GDY	2 (5%)	9 (20%)	1 (2%)	7 (16%)	0 (0%)	17 (21%)
Girls	9 (24%)	12 (26%)	19 (32%)	9 (21%)	2 (25%)	19 (11%)
Nobody	16 (42%)	7 (15%)	32 (53%)	7 (16%)	4 (50%)	35 (41%)
Multiple	0 (0%)	11 (24%)	0 (0%)	7 (16%)	1 (13%)	17 (20%)

^aHeterosexual youth = heterosexual only

^bSexual minority youth = asexual, bisexual, gay or lesbian, mostly heterosexual, queer, multiple identities, or not sure

^cGender diverse youth (GDY) = transgender boys, transgender girls, genderqueer, non-binary, or another identity