

# Sexuality in a Community-Based Sample of Adults with Autism Spectrum Disorder

Laura Gilmour\*, Melike Schalomon\*\*, & Veronica Smith\*

\*University of Alberta, Department of Educational Psychology

\*\*Grant MacEwan University, Department of Psychology

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## Background

There has been little research into the sexual interests and behaviors of individuals with Autism Spectrum Disorders (ASDs) living in the community. Exposure to increased levels of prenatal androgens causes masculinization of the brain which has been linked to both homosexual behaviors and autistic traits (Auyeung et al., 2009; Baron-Cohen, 2002). Previous research conducted in group homes suggested a higher rate of homosexual and bisexual behaviours and interests among adults with autism spectrum disorders (Haracopos & Pedersen, 2004; Hellemans et al., 2007).

## Present Study

The current study sampled 82 adults with ASD and normal intelligence ( $n_{\text{female}}=55$ ,  $n_{\text{male}}=27$ ) and 282 members of the general population. Research was conducted via online survey. We hypothesized that brain masculinization would result in a higher rate of homosexual behaviours and interests among females with ASD and a lower rate among males. We also explored the hypothesis that general patterns of sexual behaviour would be altered by ASD, and that the number of partners and frequency of sexual activity among individuals with ASD would differ from that in the general population

## Results

An overall higher rate of homosexuality and bisexuality and a lower rate of heterosexuality was found in the ASD group when compared with control subjects. Among the ASD group, a higher degree of asexuality was also noted. When comparing group by gender, females with ASD showed a lower rate of heterosexuality than males with ASD. Results were suggestive of a higher rate of homosexuality among the female ASD group, but the effect did not reach significance. No significant differences were found for number of sexual partners or frequency of sexual behaviours between the ASD and non-ASD group.

## Tables and Figures

### Group Differences in Sexuality

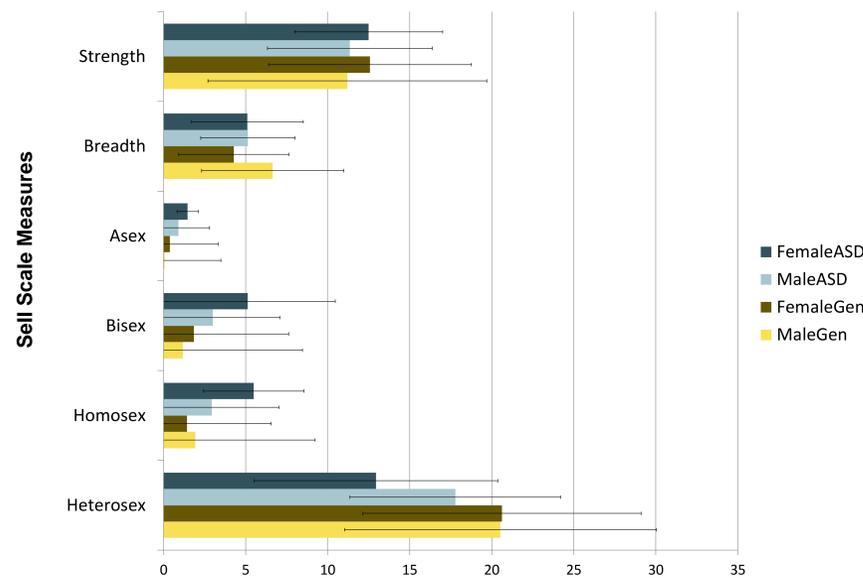


Figure 1. Scores on Sell Scale of Sexual Orientation (Sell, Wells, & Wypij, 1995). Scale was recoded by experimenters into six categories:

### Univariate ANOVAs

Measure	Sex		Group		Sex by Group	
	F(1,3)	p	F(1,3)	p	F(1,3)	p
Heterosexuality	4.22	.041*	20.47	<.001**	4.56	.034*
Bisexuality	3.93	.048*	13.16	<.001**	1.07	.301
Homosexuality	1.62	.204	9.99	.002**	3.65	.057
Asexuality	2.10	.149	9.61	.002**	0.16	.693
Breadth	5.85	.016	.47	0.494	5.47	.020*
Strength	2.23	.137	.001	.970	0.02	.897

\* $p \leq 0.05$

\*\* $p \leq 0.005$

Table 1. Scores on Sell Scale of Sexual Orientation (Sell, Wells, & Wypij, 1995). Scale was recoded by experimenters into six categories:

## Discussion

The lower rate of heterosexuality among females with ASD and suggested higher homosexuality rate supports the contention that prenatal androgen levels are associated with both ASD and sexual orientation. However, we did not find the expected lower rate of homosexuality among males. Aside from a low sample size for male ASD participants, one possible explanation is that factors other than prenatal androgen levels contribute to the development of ASD (e.g. genetics). (Gillberg & Cederlund, 2005). Jenkins (2010) suggests that a hypermasculinized brain may contribute to both male and female homosexuality. It is not likely that lack of suitable partners contributed to these results because sexual interests were highly correlated with participants' behaviours.

## Conclusion

Studies such as this one can help adults with ASD develop a greater understanding of themselves and hopefully increase their self-acceptance. A better understanding of sexuality in adults with ASD may also help family members and community workers to better understand and educate individuals with ASD on sexuality related issues. This will likely result in decreased frustration for adults with ASD and those who live and work with them.

## References

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