

This fact sheet presents the results of a literature review conducted in the summer and fall of 2018 on the links between autism and sexual and gender diversity as well as the realities of people who identify as both autistic and lesbian, gay, bisexual, trans or queer (LGBTQ+).

AUTISM, GENDER IDENTITY AND SEXUAL ORIENTATION

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According to the latest edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), autistic spectrum disorder, or autism, is characterized by difficulties in social communication and interaction, as well as by restricted and repetitive behaviours, interests or activities (American Psychiatric Association, 2013). The notion of "spectrum" indicates that the defining characteristics of autism are present in varying degrees in people affected by it, but also, to a lesser extent, in some individuals who are not autistic or who are at the threshold of diagnosis.

What are the links between autism and sexual and gender diversity?

After collecting scientific articles addressing both autism and sexual and gender diversity, we found that several of the publications reviewed suggest correlations between the two phenomena¹. Indeed, according to the studies collected, there is a higher prevalence of sexual or gender diversity among the autistic population (Bush, 2016; Dewinter *et al.*, 2017; George and Stokes, 2016; Gilmour *et al.*, 2012; Janssen *et al.*, 2016; May *et al.*, 2017 a and b; Strang *et al.*, 2014) and, concurrently, a higher prevalence of autism in the LGBTQ+ community (Brotto *et al.*, 2010; Glidden *et al.*, 2016; Holt *et al.*, 2016; Shumer *et al.*, 2015; Wood *et al.*, 2013). LGBTQ+ people are also reportedly more likely to have autistic traits, but without necessarily reaching the diagnostic threshold (Jones *et al.*, 2012; Kristensen and Broome, 2015; Nobili *et al.*, 2018; Pasterski *et al.*, 2014; Qualls, 2017; Rudolph *et al.*, 2018; Smith, 2014; VanderLaan *et al.*, 2015; Vermaat *et al.*, 2018). The presence and intensity of these traits are often measured by self-administration of the Autism Quotient questionnaire or one of its variants, which are aimed at identifying certain characteristics

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¹ We use the concept of "sexual diversity" to refer to any form of sexual orientation other than heterosexuality, including asexuality, and that of "gender diversity" to refer to trans people or people with a trans background, as well as any form of gender identity or expression that falls outside the fixed and binary categorization of gender (e.g. gender fluidity, genderqueer, non-binary) as well as social norms respectively associated with femininity and masculinity (e.g. gender non-conformity, gender variance).

of autism in adults with so-called "normal" intellectual abilities. These characteristics are grouped into five general domains: social skills, the ability to alternate attention from one task to another, attention to detail, communication and imagination (Woodbury-Smith *et al.*, 2005). It is important to note that according to several of the studies mentioned above, the correlations between autism and sexual or gender diversity are most likely to be found among people who were assigned female at birth (Bush, 2016; Dewinter *et al.*, 2017; Jones *et al.*, 2012; Kristensen et Broome, 2015; George et Stokes, 2016; Gilmour *et al.*, 2012; May *et al.*, 2017 a; Nobili *et al.*, 2018, Vermaat *et al.*, 2018).

Suggested explanations

Various explanatory models are used by the authors cited to explain the correlations previously described. A first recurrent hypothesis proposes that a mediating variable, namely fetal exposure to a high level of androgens during pregnancy, may be responsible for both a greater risk of the child developing autism and an attraction to women and/or a male gender identity, which would explain the observed links between autism and sexual or gender diversity among women assigned at birth (George et Stokes, 2016; Gilmour *et al.*, 2012; Glidden *et al.*, 2016; Jones *et al.*, 2012; May *et al.*, 2017; Pasterski *et al.*, 2014; Rudolph *et al.*, 2018; Shumer *et al.*, 2015; Strang *et al.*, 2014; VanderLaan *et al.*, 2015). However, this hypothesis appears problematic because of its lack of empirical verifiability, as well as the reductive, even pathological, conception of these forms of diversity that it tends to perpetuate (Chamberland, 2012).

More specifically, with regard to the marked willingness of people with autism to identify themselves as trans, some authors argue that this may be due to the rigid way of thinking that is characteristic of autism. Individuals affected by it would indeed tend to maintain a binary and stereotypical conception of gender, so that their slightest perceived deviation from the norms associated with gender may lead to feelings of confusion and unease that may be over-interpreted as signs of gender dysphoria (George et Stokes, 2016; Holt *et al.*, 2016; Shumer *et al.*, 2015; Strang *et al.*, 2014). However, this explanation is questioned by de Vries *et al.* (2010, cited in Strang *et al.*, 2014), whose study concludes that following a thorough psychiatric assessment, most young autistic people referred to a gender identity clinic have a stable gender identity (other than that assigned at birth) and are legitimately eligible for a gender transition.

Paradoxically, a third theoretical proposal put forward to explain the correlations between autism and sexual or gender diversity rather stipulates that the lower receptivity of people with autism to social constraints could lead them to more easily accept and affirm a gender identity or sexual orientation that is "out of the norm". (Dewinter *et al.*, 2017; George et Stokes, 2016; Gilmour *et al.*, 2012; Glidden *et al.*, 2016; Strang *et al.*, 2014). This proposal differs from previous ones in a more positive conception of autism, as well as of the sexual or gender diversity it underlies. Indeed, it implies that sexual orientation and especially gender identity, rather than constituting biologically determined and immutable attributes, can be the subject of a conscious and dynamic process whose ultimate aim is to build an identity that is as authentic and fulfilling as possible. As for the particularity of autistic persons usually referred to as their difficulty in understanding and respecting social norms, it is understood here as a form of freedom of mind allowing the realization of the creative and emancipatory potential thus associated with sexual or gender identity (Jack, 2012).

Challenges raised

The reviewed literature also points to many challenges and obstacles that may exist in the lives of people who are autistic and LGBTQ+. First, persistent ableism and hetero-cis-normativity in society can hinder these individuals' access to sexual citizenship, that is, their right to live and fully assume their sexual and gender identity and expression (Richardson, 2017), while making their double difference a significant source of harassment (Barnett, 2014 and 2017).

Autistic LGBTQ+ people would also be at greater risk of suffering from mental health problems due to the accumulation of stress factors to which they are exposed (George and Stokes, 2018). This risk is particularly important for autistic trans people who, expecting their interpersonal relationships to be facilitated as a result of their gender transition, may be disappointed to find that their social difficulties related to autism persist and thus, may develop even more severe depressive symptoms (Powis, 2017).

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autism who are affirming themselves as trans, as some of the particularities related to their neurological condition (feelings of being out of step with peers of the same age, uncomfortable or disconnected from their own bodies) may resemble the symptoms of gender dysphoria, making it difficult for professionals to fully understand the questioning about their gender identity and to target their real needs concerning their autism and/or the affirmation of their gender identity (Powis, 2017).

Interactions with peers are a last major source of difficulty for the autistic LGBTQ+ population. Since any form of difference can in itself be a pretext for rejection and intimidation among children and teenagers, young autistic people from sexual or gender diversity are particularly vulnerable to it simply because of their double minority status. Some autistic people can have difficulty understanding the mental states of others (Premack and Woodruff, 1978), and thereby have difficulty controlling how they project their own image, which can be particularly challenging for young trans autistic people. Finally, their difficulty in mastering social norms may lead them to choose inappropriate ways of seeking help and to choose risky contexts to express their newly asserted gender identity (Powis, 2017).

In addition, autistic LGBTQ+ people may encounter various difficulties in their interactions with health professionals. These professionals sometimes adopt an infantilizing attitude towards them and try to make them conform to the «norm», thus hindering the recognition of any form of sexuality or gender identity that strays from it (Moreno et al., 2017). Clinicians may also be concerned that their patient may be doubly marginalized as a result of their coming out, or suspect that it would serve inappropriate purposes, such as being more easily accepted by joining a minority group that is potentially more open to difference (The Asperger/Autism Network, 2016). Finally, they may have difficulties psychologically assessing young people with

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Recommendations to promote the inclusion of autistic LGBTQ+ people

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COMBAT DISCRIMINATION AND HARASSMENT (Barnett, 2017)

- **Recognize** in academic and activist circles **the existence** of gender-based, homophobic and transphobic harassment inherent in ableist oppression (and vice versa).
- **Legislate to allow complaints** of harassment on multiple grounds.

INTERVENE

- **Improve cultural competence** regarding sexual and gender diversity in clinical practice, research and policy around support for people with autism (Moreno *et al.*, 2017).
- **Develop concrete ways to help** autistic people express their experiences and feelings about their sexual and gender identity. For example, asking multiple-choice questions, using writing and drawing, designing and mobilizing psycho-pedagogical tools such as the [GenderBread Person](#), the [Gender Unicorn](#) or the [Gender Pretzel](#) (Powis, 2017; Healthy, Understood, Educated, Safe, 2017).
- **Support peer interactions** (Powis, 2017) :
 - Prepare autistic trans persons for potential negative reactions at the beginning of the transition.
 - Help autistic trans youth with strategies to safely express their affirmed gender identity and to find safe spaces.
- **Continue research** in the future (Bennett *et Goodall*, 2016).
- **Develop more research** on the realities of autistic LGBTQ+ people. Research topics to be explored include: **mental health, the experiences of the elderly, sexual health.**
- **Take into consideration the recommendations** of the autistic LGBTQ+ community itself. In this regard, consult the report of the Neuro/Diversités project carried out by AlterHéros in 2017.

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References

- AlterHéros. (2017). *NeuroDiversités : Explorer l'intersection entre neurodiversité et diversité sexuelle et de genre*. Récupéré de http://www.alterheros.com/cite/files/2017/11/NeuroDiversites_fr.pdf
- American Psychiatric Association (dir.). (2013). *Diagnostic and statistical manual of mental disorders: DSM-5* (5th ed). Washington, D.C: American Psychiatric Association. Retrieved from Library of Congress ISBN. (RC455.2.C4 D54 2013)
- Barnett, J.P. (2014). *Sexual Citizenship on the Autism Spectrum* (Ph.D.). Ann Arbor, United States. Retrieved from ProQuest: <https://search.proquest.com/pqdtglobal/docview/1564219584/abstract/9E43CF514D854A07PQ/14>
- Barnett, J.P. (2017). Intersectional harassment and deviant embodiment among Autistic adults: (dis)ability, gender and sexuality. *Culture, Health and Sexuality*, 19(11), 1210-1224. doi : [10.1080/13691058.2017.1309070](https://doi.org/10.1080/13691058.2017.1309070)
- Bennett, M. and Goodall, E. (2016). Towards an Agenda for Research for Lesbian, Gay, Bisexual, Transgendered and/or Intersexed People with an Autism Spectrum Diagnosis. *Journal of Autism and Developmental Disorders*, 46(9), 3190-3192. doi : [10.1007/s10803-016-2844-z](https://doi.org/10.1007/s10803-016-2844-z)
- Bush, H. H. (2016). *Self-reported sexuality among women with and without autism spectrum disorder (ASD)* (Ph.D.). Ann Arbor, United States. Retrieved from ProQuest : <https://search.proquest.com/pqdtglobal/docview/1803936932/abstract/9E43CF514D854A07PQ/1>
- Chamberland, L. (2012). La biologie de l'homosexualité : un révélateur de l'imbrication du sexisme et de l'hétérosexisme. In *Cerveau, hormones et sexe : Des différences en question* (p. 49-83). Montréal : Éditions du remue-ménage.
- de Vries, A. L. C., Noens, I. L. J., Cohen-Kettenis, P. T., van Berckelaer-Onnes, I. A. and Doreleijers, T. A. (2010). Autism Spectrum Disorders in Gender Dysphoric Children and Adolescents. *Journal of Autism and Developmental Disorders*, 40(8), 930-936. doi: [10.1007/s10803-010-0935-9](https://doi.org/10.1007/s10803-010-0935-9)
- Dewinter, J., De, G. and Begeer, S. (2017). Sexual Orientation, Gender Identity, and Romantic Relationships in Adolescents and Adults with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 47(9), 2927-2934. doi : [10.1007/s10803-017-3199-9](https://doi.org/10.1007/s10803-017-3199-9)
- George, R. and Stokes, M. (2016, septembre). *The effect of High-Functioning Autism on Sexual Orientation and Gender-Identity*. 11th Autism-Europe International Congress, Edinburgh. Retrieved from <http://programme.exordo.com/autismeurope2016/delegates/presentation/305/>
- George, R. and Stokes, M.A. (2018). A Quantitative Analysis of Mental Health Among Sexual and Gender Minority Groups in ASD. *Journal of Autism and Developmental Disorders*, 48(6), 2052-2063. doi: [10.1007/s10803-018-3469-1](https://doi.org/10.1007/s10803-018-3469-1)
- Gilmour, L., Schalomon, M. and Smith, V. (2012). Sexuality in a community based sample of adults with autism spectrum disorder. *Research in Autism Spectrum Disorders*, 6, 313-318. doi: [10.1016/j.rasd.2011.06.003](https://doi.org/10.1016/j.rasd.2011.06.003)
- Glidden, D., Bouman, W. P., Jones, B. A. and Arcelus, J. (2016). Gender Dysphoria and Autism Spectrum Disorder: A Systematic Review of the Literature. *Sexual Medicine Reviews*, 4(1), 3-14. doi : [10.1016/j.sxmr.2015.10.003](https://doi.org/10.1016/j.sxmr.2015.10.003)
- Healthy, Understood, Educated, Safe. (2017). *hues : Art, Tools, and Resources for Global Justice*. Retrieved from <http://hues.xyz>
- Holt, V., Skagerberg, E. and Dunsford, M. (2016). Young people with features of gender dysphoria: Demographics and associated difficulties. *Clinical Child Psychology and Psychiatry*, 21(1), 108-118. doi : [10.1177/1359104514558431](https://doi.org/10.1177/1359104514558431)
- Jack, J. (2012). Gender Copia: Feminist Rhetorical Perspectives on an Autistic Concept of Sex/Gender. *Women's Studies in Communication*, 35(1), 1-17. doi : [10.1080/07491409.2012.667519](https://doi.org/10.1080/07491409.2012.667519)
- Janssen, A., Huang, H. and Duncan, C. (2016). Gender Variance Among Youth with Autism Spectrum Disorders: A Retrospective Chart Review. *Transgender Health*, 1(1), 63-68. doi : <http://dx.doi.org.proxy.bibliotheques.uqam.ca:2048/10.1089/trgh.2015.0007>

- Jones, R. M., Wheelwright, S., Farrell, K., Martin, E., Green, R., Di, C. and Baron-Cohen, S. (2012). Brief report : Female-to-male transsexual people and autistic traits. *Journal of Autism and Developmental Disorders*, 42(2), 301-306. doi: [10.1007/s10803-011-1227-8](https://doi.org/10.1007/s10803-011-1227-8)
- Kristensen, Z. E. and Broome, M. R. (2015). Autistic Traits in an Internet Sample of Gender Variant UK Adults. *International Journal of Transgenderism*, 16(4), 234-245. doi : [10.1080/15532739.2015.1094436](https://doi.org/10.1080/15532739.2015.1094436)
- May, T., Pang, K. C. and Williams, K. (2017). Brief report : Sexual attraction and relationships in adolescents with autism. *Journal of Autism and Developmental Disorders*, 47(6), 1910-1916. doi: [10.1007/s10803-017-3092-6](https://doi.org/10.1007/s10803-017-3092-6)
- May, Tamara, Pang, K. and Williams, K. J. (2017). Gender variance in children and adolescents with autism spectrum disorder from the National Database for Autism Research. *International Journal of Transgenderism*, 18(1), 7-15. doi: [10.1080/15532739.2016.1241976](https://doi.org/10.1080/15532739.2016.1241976)
- Moreno, A., Laoch, A. and Zasler, N. D. (2017). Changing the culture of neurodisability through language and sensitivity of providers: Creating a safe place for LGBTQIA+ people. *NeuroRehabilitation*, 41(2), 375-393. doi : [10.3233/NRE-172187](https://doi.org/10.3233/NRE-172187)
- Nobili, A., Glazebrook, C., Bouman, W. P., Glidden, D., Baron-Cohen, S., Allison, C.,... Arcelus, J. (2018). Autistic Traits in Treatment-Seeking Transgender Adults. *Journal of Autism and Developmental Disorders*, 1-11. doi: [10.1007/s10803-018-3557-2](https://doi.org/10.1007/s10803-018-3557-2)
- Pasterski, V., Gilligan, L. and Curtis, R. (2014). Traits of Autism Spectrum Disorders in Adults with Gender Dysphoria. *Archives of Sexual Behavior*, 43(2), 387-393. doi : [10.1007/s10508-013-0154-5](https://doi.org/10.1007/s10508-013-0154-5)
- Powis, S. (2017). Gender dysphoria and autism: Challenges and support. In *Network Autism*. Retrieved from <https://network.autism.org.uk/knowledge/insight-opinion/gender-dysphoria-and-autism-challenges-and-support>
- Premack, D. and Woodruff, G. (1978). Does the chimpanzee have a theory of mind? *Behavioral and Brain Sciences*, 1(4), 515-526. doi : [10.1017/S0140525X00076512](https://doi.org/10.1017/S0140525X00076512)
- Qualls, L. R. (2017). *Sexuality and the autism spectrum: Implications for individuals with the broad autism phenotype* (M.S.). Ann Arbor, United States. Retrieved from ProQuest : <https://search.proquest.com/pqdtglobal/docview/1925911768/abstract/9E43CF514D854A07PQ/3>
- Richardson, D. (2017). Rethinking Sexual Citizenship. *Sociology*, 51(2), 208-224. doi : [10.1177/0038038515609024](https://doi.org/10.1177/0038038515609024)
- Rudolph, C. E. S., Lundin, A., Åhs, J. W., Dalman, C. and Kosidou, K. (2018). Brief Report : Sexual Orientation in Individuals with Autistic Traits: Population Based Study of 47,000 Adults in Stockholm County. *Journal of Autism and Developmental Disorders*, 48(2), 619-624. doi: [10.1007/s10803-017-3369-9](https://doi.org/10.1007/s10803-017-3369-9)
- Shumer, D. E., Reisner, S. L., Edwards-Leeper, L. and Tishelman, A. (2015). Evaluation of Asperger Syndrome in Youth Presenting to a Gender Dysphoria Clinic. *LGBT Health*, 3(5), 387-390. doi : [10.1089/lgbt.2015.0070](https://doi.org/10.1089/lgbt.2015.0070)
- Smith, A. (2014). *A neuropsychological exploration of autistic traits in a transgender population* (D.Clin.Psy.). Ann Arbor, United States. Retrieved from ProQuest: <https://search.proquest.com/pqdtglobal/docview/1775215948/9E43CF514D854A07PQ/2>
- Strang, J., Kenworthy, L., Dominska, A., Sokoloff, J., Kenealy, L., Berl, M.,... Wallace, G. (2014). Increased Gender Variance in Autism Spectrum Disorders and Attention Deficit Hyperactivity Disorder. *Archives of Sexual Behavior*, 43(8), 1525-1533. doi : [10.1007/s10508-014-0285-3](https://doi.org/10.1007/s10508-014-0285-3)
- The Asperger/Autism Network. (2016, 7 juillet). *Sexual Orientation, Gender Identity and Asperger/Autism*. Retrieved from <http://www.aane.org/sexual-orientation-gender-identity-aspergerautism/>
- VanderLaan, D. P., Postema, L., Wood, H., Singh, D., Fantus, S., Hyun, J.,... Zucker, K. J. (2015). Do Children With Gender Dysphoria Have Intense/Obsessional Interests? *Journal of Sex Research*, 52(2), 213-219. doi : [10.1080/00224499.2013.860073](https://doi.org/10.1080/00224499.2013.860073)
- Vermaat, L. E. W., van der Miesen, A. I. R., de Vries, A. L. C., Steensma, T. D., Popma, A., Cohen-Kettenis, P. T. and Kreukels, B. P. C. (2018). Self-Reported Autism

Spectrum Disorder Symptoms Among Adults Referred to a Gender Identity Clinic. *LGBT health*. doi : [10.1089/lgbt.2017.0178](https://doi.org/10.1089/lgbt.2017.0178)

Wood, H., Sasaki, S., Bradley, S. J., Singh, D., Fantus, S., Owen-Anderson, A.,... Zucker, K. J. (2013). Patterns of Referral to a Gender Identity Service for Children and Adolescents (1976–2011): Age, Sex Ratio, and Sexual Orientation. *Journal of Sex & Marital Therapy*, 39(1), 1-6. doi : [10.1080/0092623X.2012.675022](https://doi.org/10.1080/0092623X.2012.675022)

Woodbury-Smith, M. R., Robinson, J., Wheelwright, S. and Baron-Cohen, S. (2005). Screening adults for Asperger Syndrome using the AQ: a preliminary study of its diagnostic validity in clinical practice. *Journal of Autism and Developmental Disorders*, 35(3), 331-335. Retrieved from PubMed.

For more information on the Understanding Inclusion and Exclusion of LGBTQ People (UNIE-LGBTQ) Project of the Chaire de recherche sur l'homophobie of the Université du Québec à Montréal (UQAM):

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