# Gender diversity and autism

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> Centre for Applied Autism Research (CAAR)

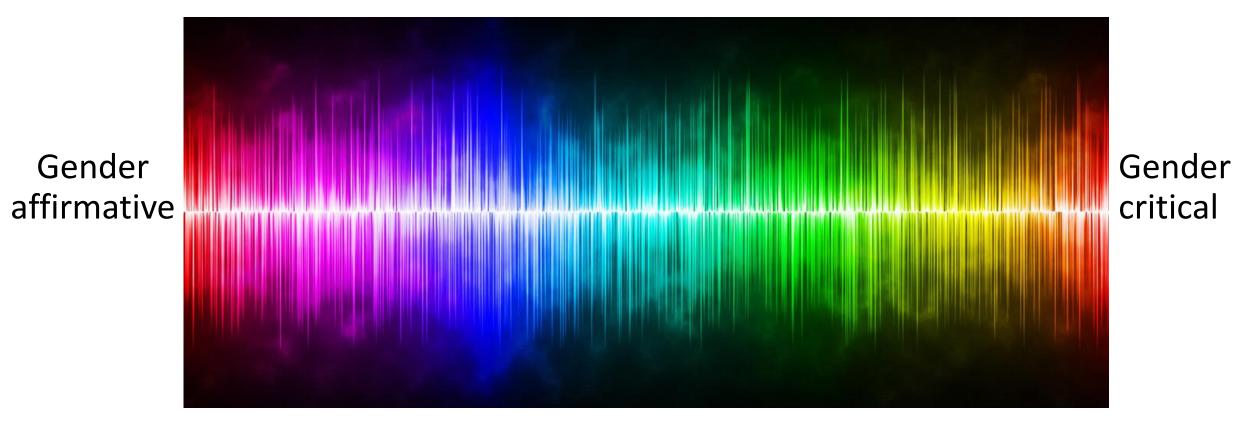


### Plan

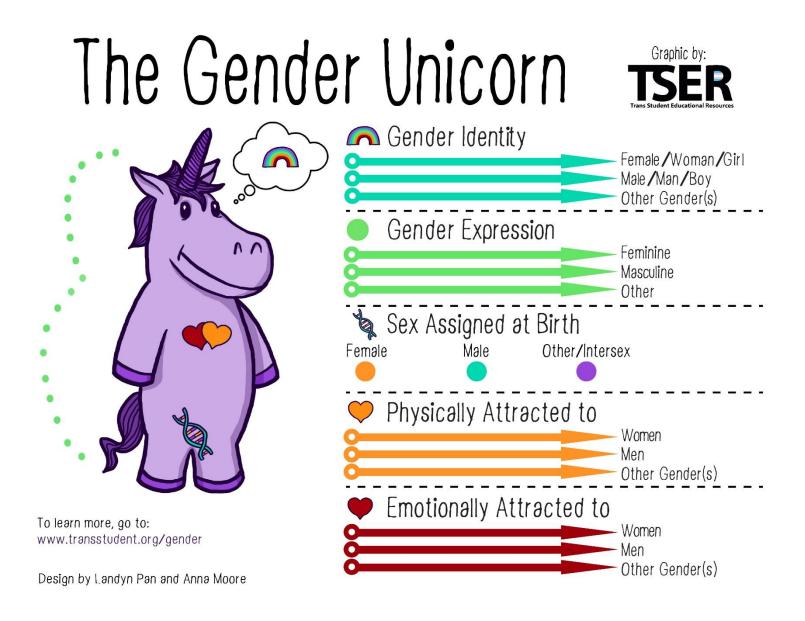
- Current political context
- Background on gender diversity
- Research evidence linking autism and gender diversity
- Possible reasons for this co-occurrence
- Clinical guidelines

## Current context

### Current context



# Background: gender



### Gender dysphoria (DSM 5)

Diagnosis made if the individual experiences two or more of these experiences:

- a marked incongruence between gender identity and sex characteristics
- a desire to be rid of one's sex characteristics
- a strong desire for the sex characteristics of the other gender
- a strong desire to be the other gender (or an alternative, i.e. non-binary gender)
- a desire to be treated as being the other gender (or an alternative, i.e. non-binary gender)
- a conviction that one has the same feelings and responses as the other gender (or an alternative, i.e. non-binary gender)

This should be associated with significant distress or functional impairment

### Terminology

- Nonbinary/gender fluid/ Genderqueer
- Gender diversity
- AMAB Assigned male at birth
- AFAB Assigned female at birth

Best way to build rapport and gain trust: ask about gender/pronouns and listen.

## **Gender Pronouns**

Please note that these are not the only pronouns. There are an infinite number of pronouns as new ones emerge in our language. Always ask someone for their pronouns.

Subjective	Objectiv <del>e</del>	Possessive	Reflexive	Example	
She	Her	Hers	Herself	She is speaking. I listened to her. The backpack is hers.	
He	Him	His	Himself	He is speaking. I listened to him. The backpack is his.	
They	Them	Theirs	Themself	They are speaking. I listened to them. The backpack is theirs.	
Ze	Hir/Zir	Hirs/Zirs	Hirself/ Zirself	Ze is speaking. I listened to hir. The backpack is zirs.	
t transstudent.tumblr.com f facebook.com/transstudent Design by Landyn Pan y twitter.com/transstudent			For more information, go to transstudent.org/graphics		

## Autism and gender diversity

### Autism in children attending gender clinics

J Autism Dev Disord (2015) 45:2628–2632 DOI 10.1007/s10803-015-2413-x



BRIEF REPORT

### **Brief Report: Autistic Features in Children and Adolescents** with Gender Dysphoria

Elin Skagerberg<sup>1</sup> · Domenico Di Ceglie<sup>1</sup> · Polly Carmichael<sup>1</sup>

Published online: 15 March 2015 © Springer Science+Business Media New York 2015

Abstract This paper looks at the association between gender dysphoria (GD), scores on the Social Responsiveness Scale (SRS), and reported diagnoses of autism spectrum disorder (ASD). Parents of 166 young people presenting with GD (Mean age = 14.26, SD = 2.68) completed the SRS. Information concerning an ASD diagnosis was also extracted from the patient files. 45.8 % fell within the normal range on the SRS and of those 2.8 % had an ASD diagnosis. 27.1 % fell within the mild/moderate range and of those 15.6 % had an ASD diagnosis and 6.7 % an ASD query. 27.1 % fell within the severe range and of those 24.4 % had an ASD diagnosis and 26.7 % an ASD query. No difference was found in autistic features between the natal females and males.

perceived gender identity and their natal sex. The diagnostic criteria for gender dysphoria in adolescents and adults are defined in DSM-V. This includes the expression of an experienced gender that is in contrast to the gender assigned at birth, the conviction that one has the typical feelings and reactions of the other gender, a strong desire to get rid of one's primary and secondary sex characteristics and acquire those of the other gender, a strong desire to be of the other gender and to be treated as the other gender or some alternative gender different from the gender assigned at birth (American Psychiatric Association 2013). de Vries et al. (2010) suggest that it is important to study the occurrence of autistic features in this population as it may occur more frequently than a full diagnosis of ASD. Studies on young people with other conditions, for examSurveyed parents of 166 young people attending a UK gender clinic, using the Social Responsiveness Scale.

- 46% scored in normal range.
- 27% fell in mild/moderate range.
- 27% were in the severe range.

13.3% of GIDS referrals in 2012 had a clinical autism diagnosis (Holt, Skagerberg & Dunsford, 2014)

7.8% in the Netherlands clinic (de Vries et al., 2010)

26% in the Finland clinic (Kaltiala-Heino et al., 2015)

# Autistic traits in adults attending gender clinics

- Nobili et al. (2018) found no differences in AQ scores between gender clinic-referred adults and matched community controls.
  - 36% vs 33% 'ASD caseness'
- Heylens et al. (2018) investigated SRS and AQ scores in those referred to gender clinics.
  5% ASD caseness according to AQ, and 6% had a confirmed autism diagnosis.



### Gender diversity in autistic adults

Journal of Autism and Developmental Disorders (2018) 48:3995–4006 https://doi.org/10.1007/s10803-018-3590-1

**ORIGINAL PAPER** 



### Gender Identity in Autism: Sex Differences in Social Affiliation with Gender Groups

Kate Cooper<sup>1</sup> · Laura G. E. Smith<sup>1</sup> · Ailsa J. Russell<sup>1</sup>

Published online: 28 April 2018 © The Author(s) 2018

### Abstract

High rates of gender variance have been reported in autistic people, with higher variance in autistic females than males. The social component of gender identity may be affected, with autistic females experiencing lower identification with and feeling less positively about their gender groups than controls. We measured gender identification, gender self-esteem, and aspects of gender expression (masculinity and femininity) in autistic natal males and females, and controls (N=486). We found that autistic people had lower gender identification and gender self-esteem than controls, and autistic natal females had lower gender identification than autistic natal males and natal female controls. In conclusion, autistic people, particularly natal females, had lower social identification with and more negative feelings about a gender group.

Keywords Gender · Social identity · Self-esteem · Sex differences · Autism · Adults

### High gender diversity in autism

	Autistic assigned female at birth	Autistic assigned male at birth	TD assigned female at birth	TD assigned male at birth			
Gender transition - plans/completed n (%)	19 (19)	5 (4)	5 (3)	3 (3)			
Gender identity							
Male n (%)	7 (7)	105 (89)	2 (1)	108 (94)			
Female n (%)	68 (67)	4 (3)	148 (97)	2 (2)			
Other n (%)	27 (27)	9 (8)	2 (1)	4 (4)			

# Reviews of evidence linking autism and gender dysphoria

### SEXUAL MEDICINE REVIEWS

### Gender Dysphoria and Autism Spectrum Disorder: A Systematic Review of the Literature

Derek Glidden, MD,  $^1$ Walter Pierre Bouman, MD, FRCPsych,  $^1$ Bethany A. Jones, MSc,  $^{12}$ a Jon Arcelus, MD, PhD $^{13}$ 

### ABSTRACT

INTERNATIONAL REVIEW OF PSYCHIATRY, 2016 VOL. 28, NO. 1, 70-80 http://dx.doi.org/10.3109/09540261.2015.1111199

Taylor & Francis Taylor & Francis Group

ARTICLE HISTORY

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Autism spectrum disorder;

co-morbidity; co-occurrence

gender dysphoria; gender

**∂** OPEN ACCESS

**REVIEW ARTICLE** 

### Gender dysphoria and autism spectrum disorder: A narrative review

Anna I.R. Van Der Miesen<sup>a</sup>, Hannah Hurley<sup>b</sup> and Annelou L.C. De Vries<sup>a</sup>

<sup>™</sup>U University Medical Centre, Centre of Expertise on Gender Dysphoria, Amsterdam, the Netherlands; <sup>b</sup>Dr Leo Kannerhuis, Centre for Autism, Amsterdam, the Netherlands

### ABSTRACT

The current literature shows growing evidence of a link between gender dysphoria (GD) and autism spectrum disorder (ASD). This study reviews the available clinical and empirical data. A systematic search of the literature was conducted using the following databases: PubMed, Web of Science, PsycINFO and Scopus, utilizing different combinations of the following search terms: autism, autism spectrum disorder (ASD). Asperger's disorder (AD), co-motivity, gender dysphoria (GD), gender identity disorder (GID), transgenderism and transsexualism. In total, 25 articles and reports were selected and discussed. Information was grouped by found co-occurrence rates, underlying hypotheses and implications for diagnosis and treatment. GD and ASD were found to co-occur diagnosis and determination of treatment options for GD difficult. Despite these challenges there are several case reports describing gender affirming treatment of co-occurring GD in adolescents and adults with ASD. Various underlying hypotheses for the link between GD and ASD were suquested, but almost all of them lack evidence.

### Introduction

The core features of autism spectrum disorder (ASD) are problems in social communication and interaction, together with repetitive behaviour and specific interests (American Psychiatric Association, APA, 2013). ASD reflects different heterogeneous clinical subtypes, formerly described as specific diagnostic entities such as

difficulties in general identity development, would be able to develop a gender identity. However, Abelson (1981) undertook a study of children with ASD and showed that, although dependent on cognitive abilities and mental age, children with ASD had the potential to develop a gender identity. It could be however, that this merely reflected a cognitive understanding of gender, REVIEWS

Journal of Autism and Developmental Disorders (2018) 48:4028–403: https://doi.org/10.1007/s10803-018-3686-7

S.I. : GENDER AND AUTISM



Gender Dysphoria, Sexuality and Autism Spectrum Disorders: A Systematic Map Review

Roald A. Øien<sup>1,2</sup> · Domenic V. Cicchetti<sup>2</sup> · Anders Nordahl-Hansen<sup>3</sup>

Published online: 18 July 2018 © Springer Science+Business Media, LLC, part of Springer Nature 2018

### Abstract

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In this systematic map review, we aimed (1) at identifying studies including the co-occurrence of autism spectrum disorders (ASD) and gender dysphoria (GD) between 1946 and 2018, and (2) to present the papers included in this systematic map review to provide authors in the field of GD, sexuality and ASD with an important database of studies focusing on this very complex topic. The field is of emerging interest, as observed by the large increase of studies over the past decades, especially since 2015. However, future challenges are to be addressed in future studies.

Keywords ASD · Gender dysphoria · Identity disorder · Sexuality

### Introduction

The term gender dysphoria (GD) is defined as a mismatch between the phenotypic sex of an individual and that person's perception of her/his own gender. GD was introduced in the latest revision of the American Psychiatric Association's classification system, DSM-5 (American Psychiatric Association 2013) as a replacement for the term gender identity disorder (GD) which had been used in the previous DSM-IV TR revision (American Psychiatric Association 2000). GID had been classified on the basis of cross-gender identification together with distress caused to the person by her/his biological sex, while GD does not require the person to be distressed by the disparity. Gender identify disorders

are also in ICD-10 (World Health Organization 1992) characterized similar to GID in DSM-1VTR. The recent ICD-11 uses the term gender incognruence to describe the same diagnosis (World Health Organization 2018). In this systematic map review we will for ease of interpretation use the term GD for both GID and GD.

In terms of prevalence, few studies have systematically measured the rate of GD in the general population. However, estimates on GD prevalence have previously been reported to be as rare as 1:50,000 (Zucker and Lawrence 2009). Recent studies have indicated that the prevalence of GD is increasing, and it is important to note that the prevalence of GD have been consistently reported to be lower in children relative to adolescents and adults (Zucker 2017). The male to-female ratio of GD is consistently reporting a male pre-

## Understanding the co-occurrence

### Does age make a difference?

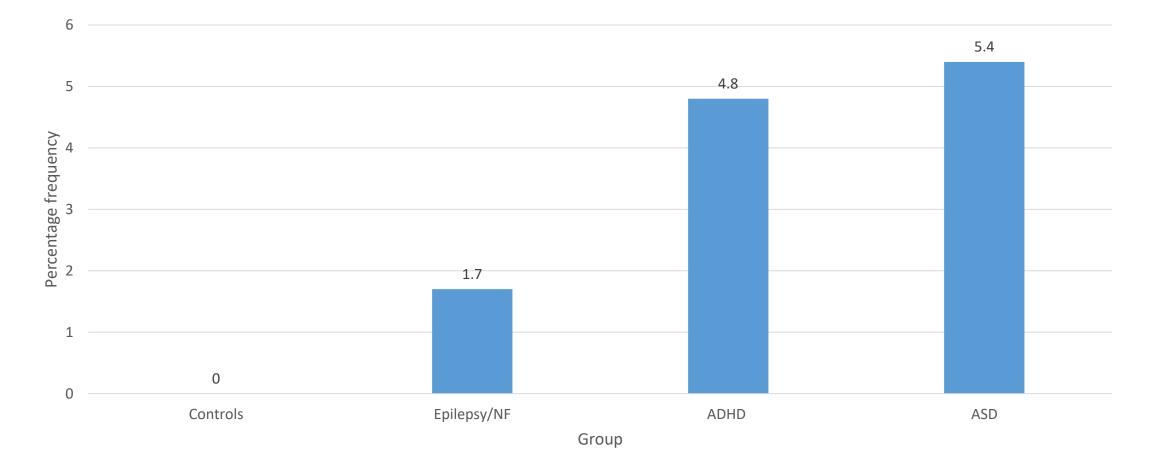
- 6.5% of autistic adolescents reported wishing to be the opposite gender, compared to 11.4% of autistic adults in the Netherlands (van der Miesen, Hurley, Bal & de Vries, 2018)
- But conflicting findings across studies.
- Possible to generalise across countries?

### Is the co-occurrence autism specific?

Strang et al. (2014)

- Aimed to look at gender dysphoria across a range neurodevelopmental conditions.
- Compared Child Behaviour Checklist item on gender dysphoria
  - Parent reports the frequency that their child "wishes to be the opposite sex" (never, sometimes or often).
- Participants (n=554) were children and young people with ASD, ADHD, a medical neurodevelopmental disorder (epilepsy and neurofibromatosis 1), and controls.

# Frequency of child wishing to be the opposite sex



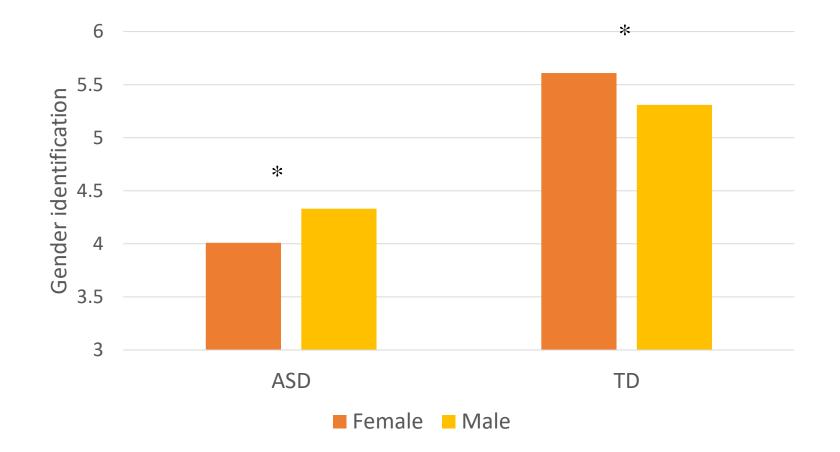
### Kaltiala-Heino et al. (2015)

- Study in Finland found that over three quarters of adolescents in a gender identity service needed additional mental health support from CAMHS.
- 5 groups:
  - A: Early onset with no mental health needs (n=2)
  - B: Early onset with mental health needs (n=3)
  - C: Adolescent onset with no mental health/developmental difficulties (n=10)
  - D: Adolescent onset with significant mental health/developmental difficulties (n=9)
  - E: Adolescent onset with identity confused development (n=23)
    - Bullied, socially isolated, often self-harming, poor school attendance, strong conviction that gender reassignment would resolve issues.

# Why are autistic people more likely to be trans?

- No conclusive evidence to date
- **Biological** "Extreme male brain". Pre-natal testosterone, sex differences in brain structures (Baron-Cohen, 2002).
- **Social** Atypical social development could lead to "gender defiance" (Bejerot & Eriksson, 2014).
- **Behavioural** Restricted and repetitive behaviours could contribute (Vanderlaan et al., 2015).

### Social differences



### Lower gender identification in autistic adults (Cooper, Smith & Russell, 2018)

### Sensory differences

### Walsh et al. (2018)

- Compared autistic adults who were transgender and cisgender on self-reported autistic traits and sensory processing
- 669 participants 100 (15%) were transgender and only 6 of these binary-trans identified.
- Trans autistic adults had higher self-reported autistic traits and lower vision and hearing sensitivity (but equivalent smell, taste, touch).
- "Autistic resistance to social conditioning"

### Intense interests

- Vanderlaan et al. (2015) looked obsessions and repetitive behaviours in gender-clinic referred children (n=534), their siblings (n=419), clinical controls (n=1201) and non-referred controls (n=1201) aged 3-12 years old.
- "Can't get his/her mind off certain thoughts"
  - Gender-clinic referred children > all other groups.
- "Repeats certain acts over and over"
  - Gender-clinic referred children > siblings and non-clinical controls
  - Gender-clinic referred children = clinical-controls.

# Clinical guidelines



### Initial Clinical Guidelines for Co-Occurring Autism Spectrum Disorder and Gender Dysphoria or Incongruence in Adolescents

John F. Strang, Haley Meagher, Lauren Kenworthy, Annelou L. C. de Vries, Edgardo Menvielle, Scott Leibowitz, Aron Janssen, Peggy Cohen-Kettenis, Daniel E. Shumer, Laura Edwards-Leeper, Richard R. Pleak, Norman Spack, Dan H. Karasic, Herbert Schreier, Anouk Balleur, Amy Tishelman, Diane Ehrensaft, Leslie Rodnan, Emily S. Kuschner, Francie Mandel, Antonia Caretto, Hal C. Lewis & Laura G. Anthony

### Assessment

**Emergency intake** – Priority is risk management, hospitalisation should be accompanied by expert gender consultation, engaging with a therapist may be critical.

**ASD assessment** – If suspected, it is important that a thorough neuropsychological and ASD assessment is undertaken. Outcome of this will inform diagnosis of Gender Dysphoria and treatment options.

**Gender-related assessment** – A structured interview should be used to assess for Gender Dysphoria. Other sources such as parents should be consulted.

### Treatment

- Appropriate clinical team Should include a specialist autism and gender clinician
- Assess intensity of gender feelings Is gender dysphoria clear, urgent, pervasive and persistent, and does it increase or decrease with intervention?
- Psycho-education about gender Explore all possible gender outcomes, targeting any deficits in cognitive flexibility
- **Provide structure for gender exploration** Support the adolescent to explore transition e.g. clothes, names, pronouns
- **Comorbidity with Autism** Assess throughout to see if gender identity is caused by features of autism, and explore alternatives to gender transition
- **Medical transition** If medical transition is indicated, ensure that fully-informed consent is gained by ensuring full understanding of risks and benefits, adapted for autistic young people
- Alternative support Ensure that any other services are suitable and adjusted for neuro- and gender-diversity

# Future research plans

### Plan for future research

• I am currently doing a 3 year fellowship to investigate the experiences of autistic people who experience distress in relation to their gender identity.

### Questions

1. What is the experience of Gender Dysphoria like for autistic people?

2. What are the positive practices and barriers to autistic young people and adults receiving the right support for GD? NHS Benefit



3. How could the NHS better meet the needs of those with autism and GD?

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NIHR National Institute for Health Research