

Making sense of gender: The perspectives of autistic children in Key Stage 2 and the adults that know them well

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Abstract

There has been little research to date, in the UK or otherwise, that uses participatory visual methods to understand how autistic children make sense of gender. This research explored the experiences of three autistic children in Key Stage 2, their parents and members of staff, using a mosaic approach to data collection. This mosaic comprised of three activities with the children to understand their opinions on clothes and toys, and to find out about their special interests. The results of these activities were fed back to them and their parents to allow co-construction. Semi structured interviews were carried out with four parents and two members of school staff to complete the mosaic. The data was analysed using Reflexive Thematic Analysis (RTA) to identify themes across the data. Five overarching themes were identified: *The child's view of the world; Self-expression through hobbies, play and interests; Making sense of clothes, making sense of people; The impact of the immediate environment; and Gendered messages are everywhere in the wider world we live in.* The findings are discussed in relation to the underpinning theory and the existing corpus of data, and avenues for future research are discussed. These findings are relevant to professionals working with autistic children and young people and shed light on the sense making process relating to gender. The aim is that we might better understand and support autistic children and those who might be gender-diverse.

Key words: ASC, ASD, autism, autistic, gender, gender identity, gender roles, gender stereotypes neurodiverse, social learning.

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List of Abbreviations Used

Abbreviation	Description
ADHD	Attention Deficit Hyperactivity Disorder
APA	American Psychiatric Association
ASD	Autism Spectrum Disorder
BPS	British Psychological Society
Cis	Cisgender
CR	Critical Realism
CYP	Children and Young People
DSM-5	Diagnostic and Statistical Manual, 5th Edition
EPS	Educational Psychology Service
EPs	Educational Psychologists
EST	Ecological Systems Theory
GD	Gender diverse
IPA	Interpretive Phenomenological Analysis
KS2	Key Stage 2
LA	Local Authority
LGBTQ+	Lesbian, Gay, Bisexual, Transgender and Queer+
ND	Neurodiverse
NHS	National Health Service
NT	Neurotypical
RTA	Reflexive Thematic Analysis
SEN	Special Educational Needs
SENCO	Special Educational Needs Co-Ordinator
SEND	Special Educational Needs and Disabilities
SSI	Semi structured interview
TA	Thematic Analysis
TEP	Trainee Educational Psychologist
Trans*	Transgender

CHAPTER 1: Introduction

1.1 Chapter Overview

This chapter begins by introducing the rationale and aims of the research. Definitions of the key terms are explained, and the chapter goes on to explore the background and current context relating to autism. National policy is drawn upon to explore the current landscape before the position of the researcher is clearly defined. Theoretical frameworks that underpin this research are then set out.

1.2 Rationale and Aims of Research

Autistic people make up around 1% of the population. Education, employment, mental health and safety outcomes are considerably poorer for this population. As Chapter 2 will show, considerable qualitative research has been undertaken to explore neurotypical children's development and perceptions of gender identity. But, despite links made between gender diversity and autism in a problematic way (Strauss et al., 2021), there is paucity of primary research that explores if there is anything different about the way that autistic children understand gender roles and expectations. This research aims to understand how autistic children make sense of gender, in its broadest sense, which will provide a unique contribution the current literature and has the potential to support the autistic community.

1.3 Key Terms Explained

Language is a tool to construct meaning. However, language can dictate the dominant discourse, and what is 'normal' (Fawcett 2018), exerting power against those who are minorities, creating oppression. As language is ever evolving, we must ensure that we use a community's preferred terminology to ensure that oppression is not further perpetuated. The key terms used in this research are set out below:

1.3.1 Autism

Autism is a lifelong developmental condition that is characterised by differences in social communication, flexibility of thinking and restricted patterns of behaviour and interests (British Psychological Society, 2021c). *Autism Spectrum Disorder* is the umbrella diagnostic term used to diagnose autism (British Psychological Society, 2021c), as set out in the DSM-5 (American Psychiatric Association, 2013). Whilst this is the current diagnostic term, the idea of autism being a deficit rather than a difference is rooted in ableism and the medical model of disability (Autism Education Trust 2021b.). As such, the social model of disability prefers not to associate the Autism Spectrum with the term 'disorder' (Autism Education Trust, 2021a).

1.3.2 Neurodiversity

The term *neurodiversity* encompasses *neurotypical* and *neurodiverse* identities. This is an inclusive way of describing different neurotypes that avoids problematising those who are neurodiverse and sees different neurotypes as a natural human variance. The term neurodiverse can be used to describe people whose neurocognitive functioning varies from the typical range (Kapp, 2020) which includes, but is not limited to, the autistic community.

1.3.2.1 The Person-First or Identity-First Debate

Within the autistic community, there is an ongoing debate between the use of *person-first* or *identity-first* language. Person-first language (e.g. a person with autism), is widely used by professionals (Adams & Liang, 2020; British Psychological Society, 2021c), with person-first language recommended when describing children (Autism Education Trust, 2021a). However, identity-first language is reportedly preferred by many voices within the autistic community (Purkis et al., 2021).

1.3.3 Gender

Gender is often assumed and is related to socially constructed characteristics of men and women (Stonewall, 2020), that is masculinity and femininity. Gender does not refer to biological differences between the sexes, but the behavioural, social, cultural and psychological aspects of the gender binary (APA, n.d.-c).

In this thesis, the term 'gender' is used to refer to gender in its broadest terms. Where a particular aspect of gender is being referred to, this will be indicated using more specific terminology, such as those set out below.

1.3.4 Gender Identity

A person's *gender identity* is their own intrinsic feeling of their gender (Stonewall, 2020). This can correlate with the sex they were assigned at birth, described as *cisgender*, *cis*, or *non-trans*. If a person's gender identify differs from their assigned sex, a person may be described as *gender diverse*, *transgender* or *trans+*. Some people may identify as *non-binary*. A person with a trans+ identity may also be described as *gender variant*.

1.3.5 Gender Expression

Gender expression is how a person chooses to outwardly express their *gender identity* (Stonewall, 2020), encompassing clothing, hair styles, and behaviour. A person's gender expression may not conform to societal expectations, but this is not indicative of a trans+ identity.

1.3.6 Gender Roles

Gender roles or *sex roles* are the typically expected or stereotyped behaviours relating to masculinity and femininity within a culture, which shapes how these concepts are understood (APA, n.d.-b).

1.3.7 Gender Dysphoria

The DSM-5 describes *gender dysphoria* as an incongruence between one's expressed gender and their assigned gender (American Psychiatric Association, 2013), which causes discomfort or distress (Stonewall, 2020). Feelings of dysphoria often reduce, when a trans+ person transitions either socially or medically to their affirmed gender (Coleman-Smith et al., 2020).

1.4 Context and Background

It is estimated that between 1-2% of children in the UK are autistic (Autism Education Trust, 2021b.; Mehlmann-Wicks, 2020), with rates of incidence rising (Newcastle University, 2021). There is a significant disparity in the ratio of diagnosis between the sexes, with three times more males than females receiving a diagnosis (Loomes et al., 2017). This disparity may be partly due to the gendered bias in diagnostic measures, rather than differing rates of incidence (Loomes et al., 2017).

Within the autistic population, there are higher incidences of mental health disorders than in the general population, which can impact on quality of life (Keating et al., 2021; Lai et al., 2019). Autistic children and young people are considerably more likely than their neurotypical peers to have co-occurring mental health issues. Studies have identified at least 70% of autistic children aged 10-14 had at least one mental health need, and 41% had upwards of two (Simonoff et al., 2008), and that 77% of autistic youths have additional psychiatric diagnoses (Eaves & Ho, 2008). Whilst there is disagreement on what constitutes positive outcomes for autistic adults and how these should be measured, autistic adults often have largely poorer outcomes relating to employment, relationships, independent living and social, emotional and mental health (Howlin & Magiati, 2017; McCauley et al., 2020).

1.5 Researcher's Position

As the researcher identifies neither as trans+ nor neurodiverse, they are acutely aware that it is not for them to speak on behalf of either of these communities.

We must ensure that we listen to the voices of each community and those whose identities intersect both. It is because of the first-hand accounts from autistic adults, that the researcher has chosen to use identity-first language throughout this thesis.

The researcher is a queer 36 year old white cisgender female, who is completing a professional doctorate in Educational Psychology. The researcher is currently on placement as a Trainee Educational Psychologist (TEP) in an Educational Psychology Service (EPS) in an outer London borough. The researcher has worked with autistic children and young people and their families throughout the course of their career. Their interest in autism first began to develop whilst working in a children's centre and supporting very young children with social communication difficulties and their families. The researcher's career has seen them work in areas of considerable social deprivation and has illuminated how having a child with a disability can lead to increased social disadvantage. Furthermore, their work in Local Authority (LA) Special Educational Needs (SEN) teams and as a TEP has highlighted that despite legislation in place to include disabled children in decision making, their voices are often heard in a tokenistic way. Throughout the previous two years, the researcher has provided educational psychology support to a specialist primary school for pupils with autism, where many pupils have reduced language and communication skills. This led to an interest in using participatory visual methods in research.

The increased occurrence of autism amongst those who are gender diverse is of particular interest to the researcher from the perspectives of intersectionality and social justice. For these reasons, it is important that we understand more about autistic people's perspectives of gender to contribute to the discourse. Exploring how autistic children learn about gendered roles and expectations is one way in which we can do this, that focusses on positive elements without problematising gender variance.

1.6 Legislation and Guidance

There are several pieces of legislation and guidance that are relevant to this research.

1.6.1 The Voice of the Child

The Special Educational Needs and Disabilities (SEND) Code of Practice, (Department for Education, 2015), is a piece of legislation that outlines the legal requirements for supporting pupils with SEN and disabilities, as defined by the Equality Act (2010). One of the key principles of this legislation is the right for all children (and their families) to be active participants in the decision making process, leading to a focus on gaining the voice of children with SEND. This legislation is in line with Article 12 of the United Nations Convention on the Rights of the Child, which sets out that any child who can form their own views has a right to express them freely. Article 13 goes on to describe the right to give and receive information and ideas in which ever medium necessary for that child (UNICEF, 1989).

The British Psychological Society (BPS) sets out in its best practice guide:

The views and perspective of the individual should be understood. The autistic person should be at the centre of decisions made about intervention. Wherever possible, their opinion should be sought directly on a regular basis, and their response to intervention should be ascertained verbally or through their body language or from those who know them well, and modifications to interventions should be made with this in mind. (British Psychological Society, 2021c, p.23)

These legislations highlight the importance of using as many methods as possible to gain the voice of children so that they can truly participate in decisions relating to them. Use of participatory visual methods is one such way to do this in research.

1.6.2 Identifying Need and Supporting Autistic CYP

The National Institute for Health and Care Guidance sets out guidelines for clinicians in diagnosing autism in CYP, including referral pathways (NICE, 2017). The Special Educational Needs and Disabilities Code of Practice (Department for Education, 2015) also sets out guidance for schools, LAs and NHS services that children's SEND should be clearly identified, and the appropriate support provided to meet these needs. The Autism Education Trust produced a progression framework that allows assessment and monitoring of autistic children's skills progression towards their personalised learning intentions (AET, 2022). More specifically for Psychologists, the British Psychological Society has produced best practice guidelines for practitioner psychologists working with autistic CYP and adults (BPS, 2021c).

1.6.3 Protected Characteristics

The Equality Act (2010) protects people of all ages from discrimination based on protected characteristics including disability, biological sex or trans+ identity. This act also applies to CYP in education settings, health and care providers and in the wider community. The Equality Act (2010) sets out protections from harassment, discrimination and requires that reasonable adjustments are made to create inclusive environments.

1.7 Underpinning Theoretical Frameworks

This section will outline the theories that the researcher feels underpin how autistic children might make sense of gender.

1.7.1 Learning about Gender: Social Cognitive Theory and Social Motivation

There are several major theories that propose how humans develop an awareness and understanding of gender, spanning biological, developmental and social mechanisms. Biological theories of gender development suggest that gender is programmed because of a physiological difference. Developmental models suggest that development occurs due to cognitive

processes, and social theories highlight that it is socially constructed. Both social learning and motivation theory are included as these explain how children learn about gender roles, expectations and appropriate gendered behaviours.

Social cognitive theory is a theory of learning that is based around a triad model of reciprocal interaction between behavioural, affective and environmental factors (Bussey and Bandura, 1999; Schunk & Usher, 2012). In essence, humans learn by observing others in their environment, but this is underpinned by a person's ability to attend, retain and reproduce these actions, if motivated to do so (Chevallier et al., 2012). Social rewards and punishments are key elements of this.

There are three areas that make up the behavioural component of Social Motivation Theory (SMT); social orienting, seeking and liking and social maintaining. Ability in each of these areas is reduced in typical presentations of autism (Chevallier et al., 2012). Reduced social motivation is suggestive of reduced susceptibility to social rewards and sanctions, which could have an impact on observational learning.

1.7.2 Ecological Systems Theory

To understand where social learning can take place, we can look to Ecological Systems Theory (EST). EST explains that there are a series of concentric environmental systems around a person (Bronfenbrenner, 1979; Neal & Neal, 2013). The closest system to the person is the micro system, which can include the family microsystem and the school microsystem, as the immediate ecological system. Outside of this is the mesosystem, which acts as a space for social interactions between individual settings. Extended family and the media exist in the exosystem. Beyond this is the macrosystem, which encompasses culture. The chronosystem was later added to reflect environmental change through a life span. Proximal processes, that is the reciprocal and ongoing interactions between the person and their environment are central to this theory (Tudge et al, 2013).

One of the criticisms of EST is that the nested model does not reflect the complexity and overlapping of human interactions, and as such there is the suggestion that a networked model might be more appropriate (Neal & Neal, 2013).

1.7.3 Theories of Difference and Disadvantage

The Social GRRAACCEESSS, (Graces), provide a mnemonic for issues of social difference that impact an individual's social power and privilege (Burnham, 2012). These are: Gender, Geography, Race, Religion, Age, Ability, Appearance, Class, Culture, Ethnicity, Education, Employment, Sexuality, Sexual Orientation and Spirituality. Some of these factors are more visible or more talked about than others, leading to the development of the visible/invisible, voiced/unvoiced matrix.

The neurodiversity paradigm draws on Intersectionality, Disability studies and the social model of disability to celebrate differences in neurocognitive functioning as valued aspects of natural variance (Strand, 2017). This is in opposition to autism being constructed as a 'disorder' by the neurotypical majority, as it varies from the favoured neurotypical 'norm'.

Whilst the Social Graces outline the many ways that a person's identity can be thought of, Intersectionality theory (Crenshaw, 1989) describes how these multiple and intersecting constructed identities can provide a degree of privilege or disadvantage, highlighting issues of power, inequality and systemic oppression (Strand, 2017). When we consider the multiple intersecting identities a person might inhabit, such as an unemployed, autistic, transwoman who is a person of colour, the potential for oppression is further multiplied. By making visible these sources of oppression, intersectionality theory can challenge further marginalisation.

Intersectional invisibility occurs when a person is not recognised as part of a group to which they belong, which causes additional disempowerment (Purdie-Vaughns & Eibach, 2008). This is particularly salient, given that autism is

considered a hidden disability, and people who are gender variant may not feel able to present as their affirmed gender, or may not appear to be trans+. Inhabiting both neurodiverse and gender diverse identities through a lens of intersectionality gives the potential for multiple oppressions in a world where most people are neurotypical and cis.

1.8 Chapter Summary

Chapter one started by outlining the rationale and aims of this research. The key terms used in this research were then defined and context and background to autism were provided. The relevant legislation was outlined, along with theories to provide a conceptual framework of how autistic people may have difficulties making sense of gender.

CHAPTER 2: Literature Review

2.1 Chapter Overview

This research is interested in how neurodiverse children understand the complex concept of gender. This chapter reviews the existing relevant literature to understand what factors impact on how neurodiverse people develop their identity. A systematic literature search was undertaken to identify papers to answer the literature review question. Papers were divided into two categories: those addressing neurodiverse identity development and those discussing gender diverse identity development. Thematic synthesis was undertaken to identify commonalities and gaps in the findings of the existing research. The findings are discussed firstly in relation to neurodiverse identity development and then in relation to gender identity development. Each section is subdivided into five themes generated in the synthesis; self-concept, relational factors, cognitive & affective factors, education & aspirations and Intersectionality. The papers selected for inclusion in this review were reviewed critically. The findings of the current research were then summarised, providing the rationale for this research.

2.2 Rationale for the Literature Search

An initial scope of the literature, carried out in November 2020 for the purposes of the research proposal found no existing primary research on the perspectives of autistic children on gender. The corpus of research was mostly focussed on the link between autistic adults and adolescents and gender diversity, with a high proportion of quantitative research. Quantitative papers mostly sought to evidence a link between autistic traits and gender non-conformity using self-report measures. Of the qualitative research that exists, the focus is on first-hand accounts from autistic adults, with participants mostly having cognitive and linguistic abilities that enable them to share their views easily with researchers.

The rationale for this current review of the literature is to further explore the neurodiverse experience of developing identity, within the existing literature.

Identity is a complex concept, which can be defined as a person's internal sense of self, related to how they see their own physical and psychological characteristics and how they are different from others (APA, n.d.-a). The Social Graces (Burnham 2012) provide a useful mnemonic to highlight these different aspects of identity that a person may feel an affiliation with. These identities may be visible to others or hidden; spoken about or not (Burnham, 2012), and as such, how we perceive ourselves may not be the same that we are perceived by others (Cresswell & Cage, 2019). Identity can also incorporate roles, social relationships and group memberships which allows a person to develop their concept of themselves (Oyserman et al., 2012). The acceptance from and feeling of belonging to a group provides a person with a social identity (Tajfel & Turner, 2004).

Studies with people of all ranges are included, to gather research relating to the wider population, given the very limited research with children. Studies with all neurodiverse populations were included, rather than just those with autistic participants, as autism is frequently comorbid with other neurodiversity. Within the literature, themes exist around gender identity and neurodiverse identity development. Studies which don't include identity development have been excluded.

2.3 Review Methodology

2.3.1 Review Question

To find appropriate literature to include in this review, the following literature review question was posed:

What themes exist in the literature about how Neurodiverse people develop their identity?

This question was chosen to make the best use of the existing literature, opening the scope of age, disability and identity in its broadest terms.

2.3.2 Literature Search and Screening Strategy

To answer the review question, a systematic search of the available literature was undertaken from the 14th - 17th of July 2021. This search encompassed the EBSCO electronic databases of Academic Search Complete, Education Research Complete, ERIC, APA PsychInfo and incorporated a search of the grey literature using ProQuest Dissertation and Thesis. These databases were selected to capture relevant literature from the fields of psychology and education, including literature that may not yet have been published.

Literature was obtained using the following search strategy:

(Thesaurus search term: Autism)

AND

(Gender identi **OR** Identity formation)*

Fields: All fields

*Limits: Since 2011, peer reviewed journals, academic journals,
English language*

Using Autism as a thesaurus or subject search term meant that related terms were also included in the search, with the generated search results including articles which had 'Neurodiverse' or 'Neurodiversity' as key words. Inclusion criteria were developed prior to commencement of the search, to develop a robust screening protocol, (See Table 1, below).

Table 1:

Inclusion and Exclusion Criteria

Criteria	Inclusion	Exclusion	Rationale
Date	2011-2021	Pre 2011	To ensure research is current
Published in	Academic journals (peer reviewed) Or Unpublished doctoral thesis	Non-peer reviewed journals	To ensure research is academically rigorous

Databases	Academic Search complete Education Research Complete ERIC APA PsychInfo ProQuest dissertation and thesis	-	To ensure research is relevant to psychology/education AND Includes recent doctoral theses that may yet be unpublished
Language	English	Not English	Researcher's first language to ensure good grasp of the literature
Age	All ages	-	To encompass whole population
Population	People with a clinical diagnosis of Autism / ASD / ASC (DSM-5) or other neurodiversity,	Not autistic participants, or those who are self-diagnosed	To ensure the research does not include the neurotypical (NT) population
Study type	Qualitative Primary research, mixed methods with large qualitative component or meta-analysis,	Not primary research, or meta-analysis	To include empirical research and comprehensive syntheses of existing data
Variable: Neurodiversity	Relates to neurodiversity (ND)	Neurotypical only (NT)	This research is related to ND population
Variable: Acquisition of (gender) identity	Factors relating to understanding / acquisition of identity or gender identity	Not relating to acquisition of identity / gender identity (e.g. correlation between GD and ASD or sexual experiences of GD people)	To explore the acquisition of (gender) identity in neurodiverse populations

As shown in Figure 1 (below), this first phase search found a total of 278 papers from 5 individual database searches; 102 from Academic Search Complete, 46 from Education Research Complete, 17 from ERIC and 113 from PsychInfo. No papers were returned in the initial search of the grey literature. Duplicates were removed and the remaining studies were screened by title and abstract simultaneously to find those that met the inclusion criteria. 22 articles were read in full and 17 were excluded at the full-text screening stage.

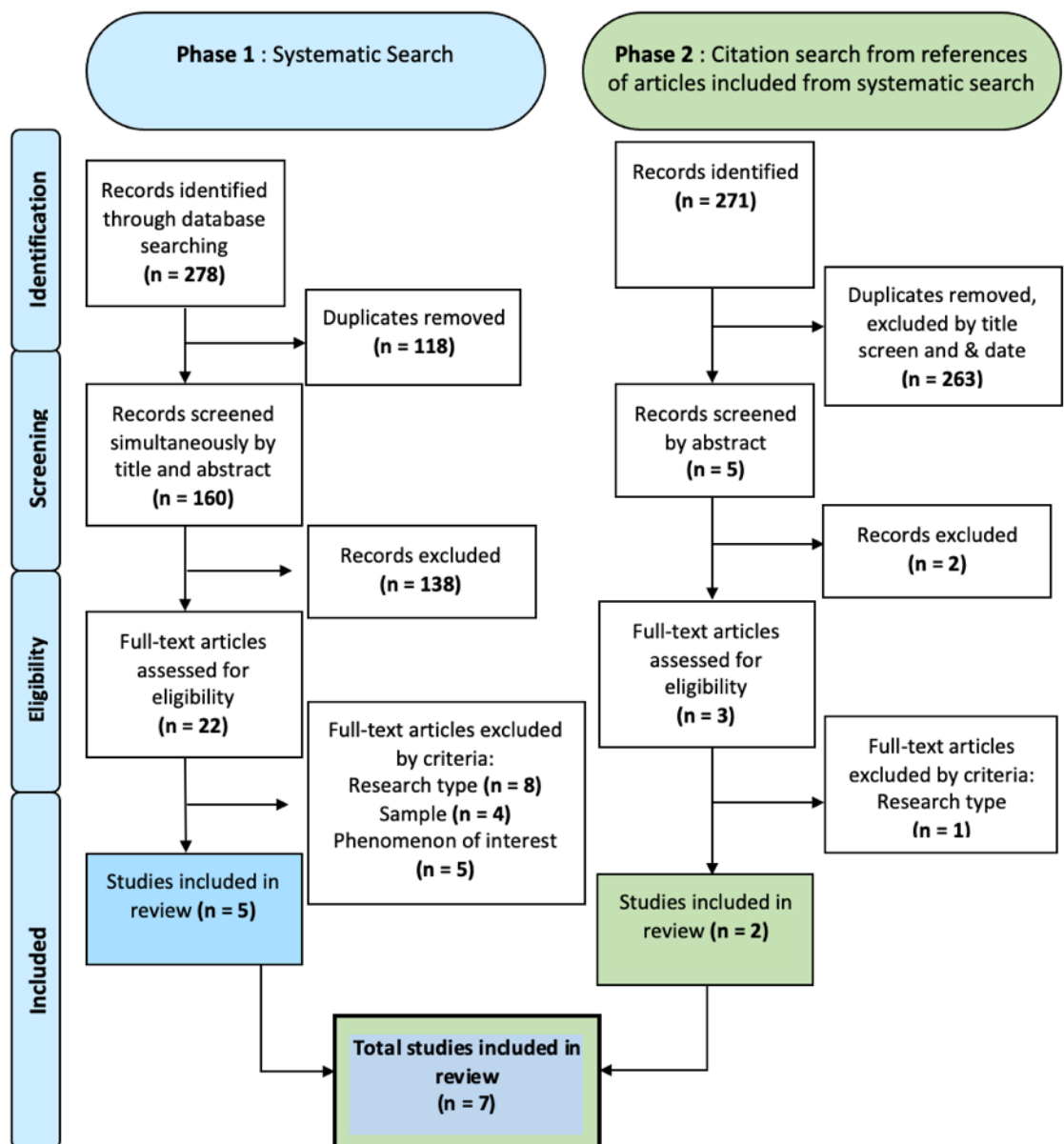


Figure 1: PRISMA flow diagram of included literature

To ensure that all relevant articles were included in this review, a second phase citation search was carried out on the five papers retrieved systematically, using the SCOPUS electronic database. This second phase citation search generated 271 papers. Duplicates were removed (including those generated in the first phase of searching) and the same screening strategy was employed for the citation search as with the systematic search. (See Appendix A for the full-text screened articles which were excluded from both search phases). The citation search yielded one additional published paper and one unpublished doctoral thesis which were selected for inclusion. Full references for the seven papers included in the review are included in Appendix B.

2.4 Thematic Synthesis

Thematic synthesis is an approach used in systematic reviews to bring together the findings of separate qualitative studies, as described in Booth et al., (2016). This approach requires data to be systematically coded and then codes to be assimilated into descriptive and analytical themes to allow for synthesis. Due to the breadth of this research and the two strands being explored, a simplified thematic synthesis was undertaken in this review. This allowed the researcher to identify patterns and exceptions within the findings of the seven studies included in this review to answer the literature review question.

The seven papers included in this study were separated into two groups: papers that outlined the lived experience of developing a neurodiverse identity and those that related to the lived experience of developing a gender diverse identity. Author reported subthemes from the findings were tabulated to enable coding into overarching themes (see Appendix C for thematic breakdown). These overarching themes were then used to develop a thematic matrix (see Appendix D). Thematic synthesis identified five superordinate themes across the literature, in order of thematic prevalence:

- Self-concept
- Relational factors
- Cognitive & affective factors
- Education & aspirations
- Intersectionality

These themes will be discussed firstly in the four papers in relation to the lived experience of developing a neurodiverse identity and then in relation to the three papers which pertain to developing a gender diverse identity.

2.4.1 Factors Impacting on Developing a Neurodiverse Identity

This section relates to the following papers: Cridland et al., (2015); DePape and Lindsay, (2016); Schott, (2012); Stenner et al., (2019). (See Appendix E for a summary table of the lived experiences of developing a ND identity)

2.4.1.1 Self-Concept

Self-concept was the most prevalent theme across these four papers, with all authors referring to different aspects of developing a neurodiverse identity. Cridland et al., (2015) reported that autism impacted on the boys' identity development, along with the biological and emotional challenges of puberty. Schott, (2015) highlighted the impact of extra-curricular activities on identity development in more than 70% of their participants. DePape & Lindsay, (2016) reported similar findings in that an autistic person's hobbies or special interests can feed into identity development. They found that whilst most participants were able to provide descriptions of themselves, many were basic and related to their hobbies rather than personality traits. Schott, (2015) and Stenner et al., (2019) both reported participants embracing a new neurodiverse identity because of a singular event, and how these related to them reframing disability, moving from a model of deficit to difference, and embracing the positive aspects of ADHD. Schott, (2015) also reported that some participants in their study rejected a neurodiverse identity, which they posited could be due to the hidden nature of ADHD. Schott, (2015) reported that the incorporation or rejection of the diagnosis into participants' identities differed depending on whether they received their diagnosis in childhood & adolescence or adulthood. Stenner et al., (2019) found that for those diagnosed in adulthood, this allowed participants to make sense of their challenging pasts and allowed them to move forward with a new understanding.

2.4.1.2 Relational Factors

Cridland et al., (2015) reported that all boys in their study had experienced bullying in some form or other and had limited opportunities for social experiences with peers and adolescent females. DePape & Lindsay, (2016) echoes limited social experiences for their participants, reporting that family relationships were most prevalent for participants within the studies. However, Schott, (2015) found that participants' positive social relationships were integral to developing a positive ADHD identity and that 60% of participants had friends who shared a diagnosis. Illustrative quotes suggest that participants with friends with ADHD found this positive for their self-esteem.

2.4.1.3 Cognitive & Affective Factors

Themes relating to cognitive differences were reported in two of the four papers. Schott, (2012) drew on behavioural, psychological and cognitive difficulties impacting on ADHD identity development in their participants. They linked those diagnosed and made aware of their diagnosis in childhood with not having the cognitive understanding of the implications of their condition. Coping strategies were reported by both DePape & Lindsay, (2016) and Schott, (2015) with participants sharing how they cope with their condition or the associated anxieties. Participants with autism either withdraw from others (DePape & Lindsay, 2016) or increase their self-awareness to understand which strategies are most effective for supporting them (DePape & Lindsay, 2016; Schott, 2015). Celebrating difference was highlighted by Cridland et al (2015), who focussed on the unique autistic perspective of the world and ability to focus on things, and Schott (2015), who mentioned increased productivity related to increased self-awareness of functioning or by being strengths-based.

2.4.1.4 Education & Aspirations

Experiences in education and employment were two common themes identified in the existing literature by DePape & Lindsay (2016). Many of the papers discussed both the challenging aspects of the curriculum, inadequate or inappropriate learning or environmental support and difficulties associated with

unstructured time in school. The need to be aware of strengths and interests to shape career pathways emerged as a salient message. However, DePape & Lindsay (2016) also reported that whilst employment was an important factor, autistic adults reported increased incidences of unemployment, fewer opportunities for career development and difficulties managing the social aspects of careers.

2.4.1.5 Intersectionality

The complexities of having multiple intersecting identities was investigated by Schott, (2015), who found that participants' insights into this were linked to their cognitive abilities. However, there was some perceived impact on developing their ADHD identity from participants' gender and sexual identities; those in minority categories, i.e. trans+ and non-heterosexual felt more strongly that these impacted on their ADHD identity. This was also echoed by the female participants in the sample, who as Stenner et al., (2019) noted are underreported in the existing literature, despite the prevalence of adult diagnoses for women.

2.4.2 Factors Impacting on Developing a Gender Diverse Identity

This section relates to the following papers: Cain & Velasco, (2021); Kanfischer et al., (2017); Strang et al., (2018). (See Appendix F for a summary table of the lived experiences of developing a GD identity)

2.4.2.1 Self-Concept

Self-concept was again the most prevalent theme across the literature, with each paper containing at least one theme related to gender or neurodiverse identity. Cain & Velasco, (2021) reported that their trans+ non-binary autistic participant found it hard to conceptualize gender as an autistic person. This was further complicated by their sexuality, aspects of gender dysphoria and a previous time on cross-sex hormone replacement therapy. Kanfischer et al., (2017) similarly reported their participants discomfort with the physiological aspects of being a woman, namely menstruation and development of breasts,

although they did not choose to define these as dysphoria, instead highlighting the sensory and routine difficulties associated with these. Strang et al., (2018) also reported significant dysphoria amongst their participants, who felt strongly that they needed to express their affirmed gender identity. Kanfischer et al., (2017) reported discomfort with gender roles and societal expectations of femininity to which they did not subscribe. Strang et al., (2018) conversely reported more gender expansiveness in their participants, who felt that they had developed their understanding of their own gender identity over time, and that they realised that they did not have to be constrained by stereotypical expectations. Medical transition was highlighted as important by both Cain & Velasco, (2021) and Strang et al., (2018).

2.4.2.2 Relational Factors

The impact of others on gender identity was highlighted in all three papers. Although not explicitly reported as a theme, Cain & Velasco, (2021) report that their participant's poor treatment from Trans Exclusionary Radical Feminists, both online and within their circle of friends, along with medical complications of cross-sex hormones contributed to their decision to temporarily detransition. Similarly, Strang et al., (2018) reported that a theme amongst their participants was a reluctance to express an affirmed gender due to worries of harassment from others. Difficulties with friendships and bullying from school peers was also reported by Kanfischer et al., (2017), which was also a theme shared with a developing a neurodiverse identity.

2.4.2.3 Cognitive & Affective Factors

Managing the challenges of being neurodiverse in a neurotypical world was discussed in all three papers with relation to the impact on mental health. Self-injurious behaviour and suicidal ideation (Cain & Velasco, 2021), depression (Strang et al., 2018) and anxiety (Kanfischer et al., 2017; Strang et al., 2018) were all discussed. In addition to that, participants in Kanfischer et al., (2017) had a range of comorbid mental health diagnoses including Borderline Personality Disorder, Schizophrenia, Bi-Polar Disorder, Depression and Attention Deficit Hyperactivity Disorder.

2.4.2.4 Education & Aspirations

Gender identity issues and additional mental health concerns were a barrier to other peoples' expectations about their future and had prevented participants from fully achieving in their education (Cain & Velasco, 2021; Strang et al., 2018). For the most part, education experiences were spoken about negatively, with challenges around changing for PE lessons and using the bathroom (Strang et al., 2018) and isolation from peers due to differing interests. These were highlighted especially at the transition point from primary to secondary education (Kanfischer et al., 2017). Hope for the future was explicitly introduced as a theme in Strang et al., (2018), where participants spoke in an overwhelmingly positive way about their hopes for the future, often relating to living in their affirmed gender and receiving medical support to do so. Similarly, the participant in Cain & Velasco, (2021) spoke about their plans for retransition.

2.4.2.5 Intersectionality

Strang et al., (2018) was the only paper of the three to explicitly have themes related to intersectionality, regarding the challenges of being both gender diverse and neurodiverse. Some participants reported that their gender identities had been questioned or not believed because they were autistic. Although not included as a theme, Cain & Velasco, (2021) also spoke about the unique challenges of conceptualising gender personally when autistic, and their participant felt that this was the case for many other neurodiverse people.

2.4.3 Summary of Themes

Across both categories of papers, several similarities and differences have emerged. Common to both those with neurodiverse and gender diverse identities are the difficulties experienced with relationships, due to bullying and harassment (actual and perceived). Similarly mental health concerns were reported across both groups, with the neurodiverse group mentioning anxiety, stress and coping. However, the gender diverse group highlighted more

serious mental health concerns such as self-harm, suicidal ideation and co-existing mental health diagnoses. Similarly, social and cognitive differences was a theme in the literature for those with neurodiverse identities, but those who were gender diverse and neurodiverse spoke about the difficulties of being autistic. Education experiences were challenging across the board, both in terms of reaching academic potential and managing the social aspects of education. However, when neurodiverse strengths were identified, and resources activated, there was a positive shift to thinking about careers. Similarly, when living as an affirmed gender, autistic adults were more hopeful of their future. Participant awareness of having multiple, intersecting identities was a theme that emerged in both sets of papers, especially amongst women, trans+ people and those with stronger cognitive abilities.

The most marked difference between the two groups of papers was the way in which self-concept was constructed. For the neurodiverse population, adoption of a neurodiverse identity was often a positive thing, that helped them make sense of themselves, and draw out strengths. However, the gender diverse papers highlighted the severe impact of dysphoria and the drive for social and / or medical transition. The abstract nature of gender and the difficulties autistic people may have with conceptualising it was also highlighted (Cain & Velasco, 2021), along with those with gender diverse identities having their gender identity doubted because of their neurodivergence.

2.4.4 Summary of Literature Review

This literature review sought to answer the question; *What themes exist in the literature about how Neurodiverse people develop their identity?* Five themes were identified across the included literature about developing neurodiverse and gender diverse identities. These were: Self-concept, Relational factors, Cognitive & affective factors, Education & aspirations and Intersectionality.

This literature review shows that for neurodiverse people, identity development is a complex thing, with a variety of different experiences reported. Some neurodiverse people find the concept of gender or their personal qualities to be too abstract and something they are not able to conceptualise. As a result, their

own sense of identity may develop from more concrete things, such as their hobbies and interests. Identity labels may also feel reductive and constraining for some people, especially when they feel that the label is perceived negatively either by themselves or others or is related to a hidden aspect of their self. Key aspects in accepting identity relates to self-identification of the label, positive peer networks and time to make sense of and accept this identity.

Identity development within the neurodiverse population appears to be further complicated by factors from within the person, such as experiencing gender dysphoria or their experiences of puberty and sexuality. Positive social interactions with others (through school and beyond) and developing a sense of belonging and kinship with others appear to be protective factors.

2.5 Critical Review

2.5.1 Weight Of Evidence

To critique the papers in this search, a Critical Appraisal Skills Programme (CASP) checklist was used to assess their validity, reliability and applicability. As this framework does not employ a scoring strategy, the researcher modified this to score papers to give an overall rating of high, medium or low weight of evidence to allow for comparison. (See Appendix G for Weight of Evidence Table and Appendix H for CASP forms.)

Cain & Velsaco (2021) provided an in-depth case study of one non-binary individual with a diagnosis of ASD, to investigate their perceptions of their intersecting identities. They held several in-depth semi structured interviews with their participant and analysed them using life story narrative analysis, through a lens of intersectionality theory. The nature of this individual case study means that it has limited generalisability, even amongst people of similar multiple intersecting identities, given the subjective nature of the participant's experience. The researchers were transparent about their critical interpretivist ontological perspective and choice of narrative analysis and reflected on the imbalance of power between the researchers and participant, which was a strength of the study. However, the primary researcher had a decade-long

friendship with the participant. Whilst this is likely to have contributed to the richness of the data gathered, choosing a participant the researcher had known socially for such a long time raises ethical questions. There was little evidence of critical reflection about this by the authors. A further strength of the study is the rigorous member checking carried out by the researchers. This paper met the criteria for 'medium' weight of evidence.

Cridland et al., (2015)'s multi-developmental stage study included 26 participants from 8 families of autistic teenage boys. Including the perspectives of parents and siblings allowed for a richer understanding of perspectives and triangulation between parents and their children. Use of personal construct theory provided a robust framework to support analysis. This paper met the criteria for 'medium' weight of evidence.

DePape & Lindsay (2016) completed a meta-synthesis of 33 studies carried out with Autistic participants of all ages and analysed findings using a narrative synthesis methodology. This paper met the criteria for 'high' weight of evidence.

Kanfiszer et al., (2017) completed research with women who had received adult diagnoses of ASD. Many had comorbid mental health concerns, and some were in inpatient treatment services, having been detained under the mental health act. A strength in this research was the inclusion of people with learning difficulties, and the support of SLTs to create accessible materials. This supported the amplification of voices of people who are otherwise often left out of the research. This paper met the criteria for 'high' weight of evidence.

Schott (2015) completed semi structured interviews (SSI) with several participants to gather their lived experiences. Ethical issues were not explicitly addressed in this research. The participants were recruited within a university and as such the sample may not be representative of the wider population. Whilst there was no member checking, a third party did help to evaluate the themes. However, themes were disparate, and the paper would have benefitted from a thematic map. This paper met the criteria for 'low' weight of evidence.

Stenner et al., (2018) selectively reports findings from their SSIs to fit with the theories of Mead's psychosocial process thinking. Their sample were women with either a formal diagnosis of ADHD or women who had self-diagnosed. Including women who did not have a clinical diagnosis means that participants who may not have had ADHD could have been included, introducing further bias into the study. This paper met the criteria for 'low' weight of evidence.

Strang et al., (2018) set out their research with three clear research questions, with robust and well-justified participant inclusion criteria. Explicit descriptions of ethical approval, links to a self-advocacy network and the use of stakeholder contributors highlights the strong attempts to accurately amplify voices of a largely excluded group of teenagers, namely those who are both GD and neurodiverse. This paper met the criteria for 'high' weight of evidence.

2.6 Implications from Current Literature

This review draws data from current research relating to 421 participants, comprising 103 from small-scale research studies in the UK, USA and Australia and a further 318 from a meta-synthesis of research spanning the period between 1984 and 2015 from Sweden, Brazil and Switzerland, USA, Australia and the UK. The ethnicity of only 12.6% of participants were reported, with the overwhelming majority of these being white American.

Similarly, whilst participants included in these studies range from 7-69 years of age, research is largely focussed on the experiences of adults. Strang et al., (2018) is the only paper included in this study which sought only the perspectives of teenagers, demonstrating that the voices of autistic children are largely unheard. Where children have been included in the research, is where whole families have been interviewed, allowing for triangulation of perspectives. However, their voices have not been clearly identifiable in the research.

Participants included in the current body of literature are likely to be of broadly average cognitive and linguistic abilities, to easily allow them to participate in the research. However, there is further ambiguity in the reporting of this.

The current qualitative literature focuses around perspectives of adults from a narrow range of ethnicities who are cognitively and linguistically able to participate in qualitative research. There is a paucity of literature around the perspectives of autistic children who live in the UK and their experiences of how they develop their identity, specifically in relation to their understanding of gender. To address these gaps, this research will seek perspectives of children from a range of backgrounds and will not exclude participants who have limited cognitive or linguistic ability. Children who are diagnosed with autism and do not have a good level of verbal communication have some of the most marginalised voices. Therefore there is a social justice issue in seeking and amplifying their perspectives.

2.7 Chapter Summary

The literature review analysed research on how neurodivergent people develop their identity, in relation to gender diversity and neurodivergence. The chapter began with a rationale of the search, and an overview of the methodology of the search. This section included the literature review question, screening strategy and inclusion and exclusion criteria. This was then followed by a thematic synthesis to identify common themes for research relating to gender diverse identity development and neurodiverse identity development.

CHAPTER 3: Methodology and Data Collection

3.1 Chapter Overview

After setting out the research purpose and aims, this chapter uses relevant methodological literature to outline the rationale for the current study's qualitative methodology in relation to the researcher's philosophical viewpoints. The research design is then outlined, in which other methodologies are considered, before introducing Reflexive Thematic Analysis (RTA). Data collection and analysis procedures are described. The chapter then details the ethical considerations taken in working with a vulnerable cohort of autistic children. Methodological trustworthiness is then considered, before a chapter summary is provided.

3.2 Research Purpose and Aims

As the literature review has shown, there is a wealth of quantitative research about neurodiverse and gender diverse adults and adolescents, much of which is focussed around causality and correlation of autistic traits or diagnoses and an accepted increased prevalence of gender diversity. Whilst there is some qualitative research that seeks to gain the perspectives of adults, there is limited research about the experiences and views of autistic children.

Autistic children are a significantly marginalised and vulnerable population, whose experiences of gender expression are underrepresented, as shown by the paucity of existing literature. For those who may have language or cognitive difficulties, there are additional barriers to gathering these perspectives.

Given the gap in the existing research, this emancipatory and exploratory research sets out to explore how autistic children make sense of gender, to understand if there is anything different about the way that they understand gender roles and expectations. Using positive psychology, non-problematic aspects of gendered expectations were explored. Drawing on the social understanding of how identity is formed, it aimed to change the dominant

discourses around gender, ensuring that autistic children's knowledge and experiences are amplified.

The aim of this research was to empower the autistic community by seeking and sharing a range of autistic children's perspectives, gained by participatory visual methods and adapted to their level of cognitive and communicative ability. It aimed to shape the current discourse around gender diversity and neurodiversity by amplifying voices of autistic children in middle childhood about how they perceive messages about gender.

3.2.1 Research Questions

This research explored the views of a population whose language, communication and learning needs could make it hard for them to directly discuss the research topic. As such, the following three research questions have been selected to allow multiple 'listening' (Clarke, 2005), that is triangulation from multiple perspectives:

1. What influences the development of Key Stage 2 autistic pupils' constructs of gender?
2. How does play relate to autistic children's understanding of gender?
3. What are key adults' experiences of autistic children's awareness and understanding of gender?

3.3 Research Philosophy

The design and methodology of research is underpinned by the philosophical viewpoints of the researcher in relation to ontology and epistemology. These will be outlined below:

3.3.1 Ontology

Ontology relates to the nature of reality (Braun and Clarke, 2022), and the claims that we can make about it. In this research, the explored phenomenon is how gender is made sense of by autistic children. There are a continuum of

ontological positions between realism and relativism (Moon and Blackman, 2014). Realism assumes that there is a single reality that can be discovered, (Lincoln et al., 2018). Conversely, relativism takes the position that there are multiple realities that exist as a result of individual human experience (Braun and Clarke, 2022; Levers, 2013; Moon and Blackman, 2014). The critical realist ontological perspective falls between the two ends of the spectrum. Whilst critical realism accepts that there is a singular reality of a phenomenon, it takes the position that each person will have their own interpretation of this reality. This interpretation is both shaped by and embedded in the social world, with particular reference to language and cultural context (Braun and Clarke, 2022). In psychology, critical realism often adopts a political position (Sullivan et al., 2012), which can support emancipatory research aims.

3.3.2 Epistemology

The epistemological perspective explains what we can know and how it can be known (Levers, 2013; Willig, 2013), and like ontology, there are a continuum of perspectives. Objectivism posits that a single truth exists and can be uncovered objectively (Braun and Clarke, 2022; Willig, 2013). On the other end of the spectrum, constructionism says that knowledge is produced as a result of human experience and interactions (Crotty, 1998). As such, each person will have their own individual perspective of the same event or experience, and how they make sense of this will be because of their socio-cultural and historical experiences (Moon and Blackman, 2014).

The subjectivist epistemological perspective falls some way between positivism and constructionism. It states people create their own subjective understanding, related to their individual context (Levers, 2013), and they do this in a way that makes sense to them. We can only access their interpretations of the truth, rather than the truth itself.

3.3.3 Researcher's Position

This emancipatory and exploratory research is carried out in line with the researcher's ontological and epistemological viewpoints.

The researcher's thinking around the nature of reality is in line with that of a critical realist ontology, namely that there are multiple perspectives of a singular truth (Braun & Clarke, 2022). In the context of this research, whilst biological sex exists, the phenomenon of gender is a social construct that exists separately from this. Furthermore, there are multiple socially constructed interpretations of gender roles and expectations, with each person having a unique perspective. Culture and language are central to giving these experiences meaning.

The researcher adopted a subjectivist epistemological stance regarding how we can know these perspectives of gender. Individuals can share their value-laden interpreted perspectives of their realities related to gender, which they have made sense of through their interactions with others (Levers, 2013). For example, autistic children will each have their own experiences of making sense of gender, due to their unique environments, experiences of education and interactions with key adults and their peers. In the act of eliciting their interpreted perspectives, knowledge will be produced by this interaction with the researcher and will be shaped by the researcher's interpretation of this, born from their own subjective experiences and interactions (Kivunja and Kuyini, 2017).

This philosophical thinking is firmly aligned with the interpretivist paradigm, which seeks to understand subjective human experiences and the meaning people make of them (Kivunja and Kuyini, 2017). This led to both a critical review of qualitative research and the choice of qualitative research design.

Undertaking exploratory research using a critical realist ontological approach acknowledges the complex socio-political and historical influences and intersecting disadvantages that people with disabilities are affected by. Drawing on intersectionality theory, Crenshaw (1989); & Disability Rights Movement (Charlton, 1998), highlights emancipatory aims for this research; the way that knowledge is produced is through social construction, relating to the complex historical and socio-cultural contexts.

3.4 Research Design

As this research set out to understand how autistic children make sense of gender in its broadest terms, a qualitative research design was required.

3.4.1 Intersectional Perspective on Research Design

As a queer, white, cis-gendered, able-bodied female researcher conducting research with a disabled population from a range of ethnicities and backgrounds, the researcher has taken an intersectional perspective on conducting research about people's sense-making, which aligns with the critical realist ontological perspective. Intersectionality theory, as described in Crenshaw, (1989) is a theory of identity which acknowledges the multiple intersecting and overlapping identities that a person has, to understand the prejudices they face. To understand the possible intersections of identity, we can look to the Social Graces (Burnham, 2012).

The researcher feels passionately that knowledge should not be produced only by the dominant group(s); that it should come from those to whom it relates, no matter how difficult it may be to gain their perspectives. This is in line with thinking of the Disability Right Movement's plea for 'Nothing about us without us' (Charlton, 1998). The idea that whoever produces the dominant discourse has the power to define what is 'normal' (Fawcett, 2018) highlights the importance of accessing and amplifying the voice of these children. This led to the decision to design the methodology based around visual methods.

The Interpretivist paradigm allows for multiple interpretations. The researcher acknowledges the subjective nature of this analysis and sought to triangulate the knowledge produced by using a Mosaic Approach (Clark and Moss, 2017). By bringing together the perspectives of autistic children, their parents and key adults in their education and checking this back with the participants, knowledge was co-constructed, ensuring the voices of the included communities were amplified, (See Section 3.5.4 Procedures for Data Collection).

3.4.2 Critical Review of Data Analysis Approaches

To ensure the research questions could be answered through analysing the data, the researcher critically reviewed various methods of qualitative data analysis to select a method of analysis consistent with their philosophical perspectives and the type of data produced. In this instance, the data was a mixture of visual images (produced during each activity with the child) and video recordings containing speech. The approaches of Interpretive Phenomenological Analysis, Content Analysis, Grounded Theory, Discourse Analysis and Polytextual Analysis were each considered before being ultimately discounted.

3.4.2.1 Interpretive Phenomenological Analysis (IPA)

As this research was around understanding perspectives and subjective experiences, the researcher initially considered the phenomenological research tradition. IPA is concerned with sense-making and interpretation, with a small group of homogenous participants who are sampled purposively. A detailed analysis is carried out of each dataset before they are synthesised. IPA was not selected for use in this study because the data gathered was not just interviews of first person perspectives, and the researcher held the belief that the experiences of the individuals could not be separated from the socio-political context. Braun & Clarke, (2021) suggest that where this is the case, IPA may not be a suitable approach.

3.4.2.2 Content Analysis

Content Analysis is a method of systematically coding and categorising text to determine patterns (Vaismoradi et al., 2013), and is often described as atheoretical, a point challenged by Braun & Clarke (2021). Content Analysis often uses frequency of words to turn qualitative data into quantitative (Braun & Clarke, 2006) and as such, risks losing context, affecting meaning (Vaismoradi et al., 2013). There are clearly reflexive limitations, given the perceived lack of theory. Similarly, looking at frequency in this data would not answer the research questions. For these reasons, Content Analysis was not selected.

3.4.2.3 Grounded Theory

Grounded Theory is a complex methodology which categorises data, links it, and develops new theory from the data analysed (Willig, 2013). However, the lack of perceived reflexivity in this methodology was concerning to the researcher. Furthermore, Grounded Theory has a realist ontology of a single truth that can be captured, rather than the researcher's notion of multiple perspectives, as with the critical realist approach. As this research did not aim to develop a new theory and time was limited, Grounded Theory was not selected for this research.

3.4.2.4 Discourse Analysis

Discourse Analysis relates to an approach of analysing discourse and focuses on the language used (Willig, 2013), on the basis that language itself is a way of expressing a person's reality. Given that the child participants in this study were neurodiverse with clinical diagnoses of autism, which can impact on language, Discourse Analysis was rejected for this analysis.

3.4.2.5 Polytextual Thematic Analysis

Visual means of data analysis have been commonly used in disciplines such as anthropology and cultural studies, with many purposes, including understanding the production of identity (Gleeson, 2020). Polytextual approaches are those where meaning is drawn from multiple 'texts', under the assumption that each is based on the others. According to Fawns, (2020), "the visual shapes, and is shaped by, non-visual elements that cannot be separated out without disrupting the fabric of the whole encounter" (p.488).

To maximise the production of knowledge, the researcher also considered use of Polytextual Thematic Analysis for the visuals produced by each of the child participants in their data collection activities. Polytextual Thematic Analysis is similar to TA in that it seeks to identify patterns within data but uses multiple types of data. Themes are generated using existing cultural artefacts. It is

inductive and epistemologically neutral (Gleeson, 2020), so is suitable for use within the interpretive framework.

Whilst PTA would increase the rigor of the analytic process, it was decided that the limited project time would not allow for two separate analytic methods to be employed. As TA can be used with visual data, it was decided to employ the RTA process to the pictorial as well as verbal data.

3.4.2.6 Thematic Analysis

TA is particularly effective when used to answer questions about conceptualisations or social phenomena Willig, (2013). TA is also flexible in that it can be used with a range of different data, rather than solely text. It can be used to answer questions from a range of different philosophical perspectives and reflects its ontological and epistemological orientations in the basis of the research question. In this research, the questions were related to how autistic children make sense of the complex concept of gender, with data analysis set within the critical realist ontology, subjectivist epistemology and the interpretivist tradition.

The researcher acknowledged that they had an integral role in the production of knowledge; their subjective experiences shaped how the knowledge was co-constructed. Recognising this researcher subjectivity is consistent with the interpretivist research paradigm. For this reason, Reflexive Thematic Analysis (RTA) was selected as the method of analysis. RTA is a theoretically flexible version of TA, which is transparent about the philosophical approach the researcher is using (Braun & Clarke, 2019). The researcher acknowledges that the themes generated as part of this analysis cannot exist without the researcher, who brings with them their own values and experiences (Braun & Clarke, 2021), which in turn shapes their interpretation of the data and how knowledge is produced (Braun & Clarke, 2019).

Reflexive TA needs to be implemented with theoretical knowingness and transparency; the researcher strives to be fully cognisant of the philosophical sensibility and theoretical assumptions informing their use

of TA; and these are consistently, coherently and transparently enacted throughout the analytic process and reporting of the research. They are aware of the need to make decisions around analysis, and they knowingly engage and make them. (Braun & Clarke, 2019, p. 594).

3.5 Data Collection

3.5.1 Qualitative Research: The Mosaic Approach

As set out in the Research Philosophy section above, data collection is underpinned by the Interpretivist paradigm and intersectionality theory, (Crenshaw, 1989). Participatory methods can be accessed by children with a range of SEN, as described by Wallace & Giles, (2019). An adapted mosaic approach was selected for the design of this study to allow for a flexible and inclusive way of gaining the voice of children with social pragmatic difficulties by “calling on their ‘hundred languages’” (Clark & Moss, 2017, p. 34).

Fundamental to the mosaic approach are the three principles that children are the experts in their own lives, that tools are adapted for the children’s’ strengths and that meaning can be constructed between the children and adults, (Clark & Moss, 2017). The voice of the child is an integral aspect of the Special Educational Needs and Disability Code of Practice (Department for Education, 2015), a key piece of legislation guiding Educational Psychologists’ practice. Gaining the voice of children who might otherwise find it difficult to express their wishes and have others speak for them is not only in line with the emancipatory approach, but also aligns with Article 7 of the United Nations Convention on the Rights of Persons with Disabilities (UNICEF, 2006), relating to freedom of expression and the right for all children to have their voices heard.

During the critical literature review, no mosaic approach studies were identified for inclusion. To the best of the researcher’s knowledge, no studies have been carried out to understand how autistic children make sense of gender, using a mosaic approach.

The mosaic uses several participatory visual methods to collect data from a child’s perspective to co-create an understanding of their world (Clark & Moss,

2017). It is a method of developing a shared narrative, where the child is the expert in their own life, that can include adults that know the child well to help triangulate meaning. This aligns with the critical realist perspective that there are multiple interpretations of a single reality, shaped by historical and socio-political contexts, rather than the positivist single truth. However, the voice of the child remains at the heart of the approach. The use of participatory visual methods, along with co-constructing meaning between the researcher, child and adult participants allows differing perspectives to be co-constructed, to create a richer understanding.

Given the context of COVID-19 at the time of research design and data collection, the researcher opted to collect all data remotely. There were several reasons for this decision. Firstly, as a means of reducing risk in terms of limiting unnecessary contact with pupils, parents and schools, when the researcher is required to visit education settings regularly as part of their trainee placement. Secondly, the researcher felt that given the unpredictable nature of the pandemic, and intermittent school closures seen between 2020-2021, that virtual data collection in school may not have remained viable, should schools go into a further period of closure. Thirdly, the researcher considered that by not meeting the researcher in person, child participants may have been more comfortable around data collection, as a familiar adult from school provided a secure base for them.

The researcher collected the following data to form the “living picture” (Clark & Moss, 2017, p. 33) of children’s’ lives:

- A toys and clothes sorting and scaling activity.
- A craft activity to dress gingerbread people in different clothes.
- A ‘show and tell’ activity.
- A co-construction discussion with the parent and child
- An informal interview with parents/carers.
- An informal interview with a member of school staff.

Further information on these activities can be found in section 3.5.4 Procedures for Data Collection:

3.5.2 Exploration Of Methods

An informal exploration of methods was carried out in November 2021. This included four neurotypical children, one male and three female, recruited by convenience sampling. All children were British Bangladeshi and were in Key Stage 2 in schools in outer London boroughs. The neurotypical children provided a baseline for gender norms for clothes and toys. Feedback was gathered on the information and consent booklet for children, along with the resources chosen for data collection with child participants. Amended resources for data collection were co-produced with the children, and the booklet was amended based on their suggestions, along with supervision from an Autism Specialist EP colleague within the researcher's placement authority.

3.5.3 Participants

3.5.3.1 Recruitment and Sampling

Participants consisted of three Key Stage 2 autistic children, one male and two female. They were aged between 8 years and 10 months and 10 years and 4 months at the point of data collection. All child participants were educated in mainstream primary schools in a diverse borough in Greater London. Details of participant characteristics can be found in table 2, below.

Participants were generated using purposive sampling, given the inclusion criteria; participants required a clinical autism diagnosis and be in Key Stage 2 in school. In May 2021, the researcher approached a special primary school for pupils with autism and social communication difficulties, allocated to them within their placement authority. Despite the school's initial interest in the research and attempts to recruit using the recruitment poster (See Appendix I), no participants were generated. In September 2021, the researcher approached two mainstream primary SENCOs in their placement borough. The SENCOs each identified pupils that fit the participant criteria and distributed the study information to their parents. Two participants were identified this way. In addition to this, in October 2021, the researcher distributed the study information to the practitioners within their placement EPS, for distribution to

SENCOs in their allocated schools. No participants were generated in this manner, so participants were sought by sending the recruitment poster to parents affiliated with the borough's local National Autistic Society branch. One additional participant was recruited in this way.

A total of four parental and child consent forms were returned to the researcher. Three child participants were selected based on meeting the suitability criteria and parental availability.

In addition to the three child participants, there were also six adults, four of whom were the parent/carer of a child participant, and two who were members of staff in the child participant's school that knew the child well.

Table 2:

Characteristics of Participants

Participant Cluster	Type	Name	Age	Aware of diagnosis?	Ethnicity	Country of Birth
1	Child	Bob	10:4	N	Mixed	England
	Parent	Carolina	46		Colombian	Colombia
	Staff	Özge	35		British Turkish Cypriot	England
2	Child	Ava	9:11	N	Black British	England
	Parent	Amanda	-		Black African	Democratic Republic of Congo
	Staff	Melissa	64		White British	England
3	Child	Suri	8:10	Y	White British	England
	Parent	Rachel	-		White British	England
	Parent	Nick	-		British Greek Cypriot	England
	Staff					

3.5.4 Procedures for Data Collection

Figure 2, below, provides an overview of the data collection activities



Figure 2: Timeline of data collection activities

3.5.4.1 Setting

Data was collected with children in quiet rooms in their school settings during the school day and was supported by a member of school staff who knew them well. The decision to engage in data collection at the child's school was made on the basis that working with a familiar adult would provide a secure attachment base for the child, which was deemed more ethical than meeting the researcher, a stranger, in person, which could have been anxiety provoking for the child.

3.5.4.2 Prior to Data Collection

Prior to data collection, the researcher met with schools to provide information sheets about the data collection activities, discuss how data collection would

take place, agree a suitable location and to provide the resources required to complete each activity.

3.5.4.3 Collecting Data with Children

3.5.4.3.1 Activity One: Sorting and Scaling

The researcher chose this activity first to identify the preferences of each child, to further tailor the mosaic towards their individual preferences.

This activity was loosely based on the Michigan Gender Identity Test (MGIT), as described in Abelson & Paulsny (1978). In this study, 52 children with cognitive and language difficulties, aged 3 years and 1 month to 10 years and 6 months were asked to sort animals, objects and children into groups. This was done alongside a control group of 36 typically developing children. Children were required to sort photographs of dogs and balls, before sorting photographs of children in gender-stereotyped clothing with gender-congruent hair styles into groups of boys and girls. Participants were also required to sort a photograph of themselves into the category of either 'male' or 'female' to identify whether they had attained gender identity.

Each child taking part in this research project took part in the sorting activity, with the help of a supportive adult from their school community. This adult was selected by the school when agreeing to support data collection. Children were provided with three hoops and a series of different laminated photographs which were provided in 3 sets of 9 pictures, (See Appendix J). Laminated photographs of real items were chosen rather than illustrations, as autistic children have difficulties with symbolic understanding, as described in Wainwright et al., (2020), so using illustrations would have been more abstract and would have required a greater level of understanding. Whilst use of real objects would have provided more concrete examples and been less cognitively demanding, this was deemed impractical and unsafe within the context of COVID-19.

Participants were first asked to categorise pictures of cats, dogs and balls into their respective categories to identify whether they were able to categorise. If they found this task difficult, the task was simplified by removing one hoop and the pictures of dogs, to allow them to group the cats and balls together. The second round required children to categorise 9 pictures of clothes into the groups: girls, boys or girls & boys. If they had completed the simplified version of the first round, participants were given only 2 hoops, and were required to categorise 6 photographs of clothes into the categories of: girls or boys. The third round of this activity used photographs of toys and used the same category labels as the second round. The inclusion of clothes and toys to understand how the participants made sense of gender was made on the basis that 'clothes and artefacts' are important in the way that gender is socially constructed (Änggård, 2011).

For children who were able to complete sorting with three categories, an additional scaling activity was introduced. First the researcher provided teaching using the child's answers to the clothes sorting activity to show them how to use the scale. The child then moved on to the sorting activity with the toys (as above) and then after sorting, they were asked to scale their answers.

Prompting, encouragement and redirection to the task was provided both by the researcher and the supportive adult, as required. To maximise participation, children were encouraged to independently place their pictures into categories, but where additional support was required, the supportive adult provided verbal encouragement and moved the pictures based on the child's direction.

3.5.4.3.2 Activity Two: Gingerbread Activity

This craft activity was chosen to progress from the sorting and scaling activity. For this activity, children were presented with a simple illustrated gingerbread person, that were non-binary in their presentation (for example, no genitals, and no makeup). (See Appendix K for a sample of the gingerbread person and garments). The children were presented with a selection of laminated garments and were asked to dress the person as a boy, then as a girl, and then finally with clothes that boys and girls can both wear. The paper people were chosen

to be neutral 'gingerbread person' forms, to ensure that their design did not influence how participants chose to dress them. Once a child had dressed a person, the researcher asked them why they had chosen to dress the person in those clothes. Verbal prompts were given to encourage the child that there was no right or wrong answer.

Whilst the illustrated people and clothes were more abstract than the photographs used in the first task, illustrated people and garments were selected to make them truly genderless. As the activity of choosing clothes and wearing them is something that would be familiar to every child and is an activity common in children's play (such as dressing a doll or choose a 'skin' for a computer game character, for example), the researcher felt that this would negate the abstraction of resources.

3.5.4.3.3 Activity Three: Show and Tell Activity

The final piece of data collection with child participants was a "show and tell" activity. This activity was chosen to be last as it was an opportunity for the child to share something more personal to them, which the researcher thought would be more successful after the child had had the opportunity to become more comfortable with the researcher after completing the previous two activities. The researcher asked each child to share a precious artefact that they liked or thought represented them. This was ideally something which the pupil had brought from home, but they could bring something from the school environment if this was not possible. The nature of this session allowed the child to share the artefact in whichever way was best for them, for example, they could simply hold it to show the researcher, use a single word or short phrase, or talk about the artefact in greater detail. The artefact was then used to find out more about the child's interests.

3.5.4.4 'Multiple Listening': Collecting Data with Adults

The critical realist ontological tradition sets out there are multiple subjective interpretations of a phenomenon rather than the positivist notion of a singular truth. In keeping with this, the mosaic approach sets out the need for multiple

listening, that is enabling children to reflect with other people, including parents and practitioners. For this reason, the researcher carried out SSIs separately with the member of school staff who had supported data collection and the child's parent/carer. This allowed for triangulation and a holistic approach to understanding the child's perspectives.

3.5.4.4.1 Interview with School Staff

Semi-structured interviews were carried out with the supportive member of school staff who had assisted in the three data collection activities with the child. An interview schedule was produced to explore the three research questions with the members of school staff. (See Appendix L for SSI interview schedule for staff). The schedule included open questions in the following sections:

1. An introductory section to find out about the member of staff's experience in working with children
2. Exploration of how the staff member feels the school supports children to develop their sense of identity.
3. Clarifying how the staff member understands gender (to minimise the effects of linguistic variability as described in Willig, 2013).
4. Eliciting how the staff member sees the child, relating to their gender identity and interests
5. Eliciting how the staff member thinks the child sees gender and how the child thinks that gender relates to them.

Additional prompts were added to the schedule in case the interview questions alone did not provide sufficiently rich data. The aim was for the interview to feel like a casual conversation rather than a formal interview, so the interviewer took direction from how the interviewee answered their questions to achieve a good flow.

3.5.4.4.2 Co-construction with Parent and Child

The researcher met with the child and parent/carer(s) of each child participant, after all three child data collection activities had taken place. The purpose of this meeting was to revisit with the child what they had shared with the

researcher and to co-construct meaning with them and their parents in a flexible and informal way, using pictures. As this meeting took place virtually, the researcher was able to share back photographs of the work the child had produced by making a slideshow which could provide points for discussion with both the parent and child (Willig, 2013), producing additional verbal data for analysis. (See Appendix M).

3.5.4.4.3 Semi-Structured Interview with Parent

The final part of the mosaic was an SSI interview with the parent/carer of each child, which took place after the co-construction discussion. (See Appendix N for schedule). The aim of the SSI with the parent/carer was to explore the research questions with the parent in an informal and relaxed way, that provided sufficiently rich data. The interview followed a schedule, with questions like those posed to the practitioner, over the following areas:

1. Understanding the family make-up and home environment.
2. Eliciting the parental understanding of what gender means (to minimise the effects of linguistic variability as described in Willig, 2013).
3. Understanding how parents feel gender develops.
4. Eliciting how parents see their role in supporting identity development in their child how the parent sees the child, relating to their gender identity and interests.
5. Eliciting how the parent thinks the child understands gender and how their child thinks that gender relates to them.

The reason for including parental views in this way was in acknowledgement of parents often having a great deal of knowledge about their child's interests, passions and worries (Clarke, 2005).

3.6 Data Analysis

Data analysis was guided by the researcher's belief that each person has their own interpretation of reality that has been socially constructed, and meaning is produced because of their interactions with others. In this research, that relates to each child and adult having their own valid perspectives around gender, which exist alongside multiple other interpretations of reality. How they make

sense of their reality relates to their experiences within their family, social, cultural and political contexts. This relates to critical realist ontological and subjectivist epistemological positions, within the interpretivist paradigm.

To ensure that the voice of the children participating in this research was prioritised, analysis of the data started with the data collected from the child participants before moving onto the adult data. (See Appendix O) for the sequence of analysis). This ensured that the emerging codes and the themes developed from the voice of the child, triangulated with the adult data. The decision to do this was to ensure that the adults were not speaking for the children, and that the autistic voice was amplified.

3.6.1 Analysing Visual Data

Visuals can be used to elicit verbal data, which can enrich our understanding of things which may be hard to explain (Gleeson, 2020). However, when working with people with additional communication, language or learning needs, relying on verbal data alone is counter-intuitive. Use of visual analysis acknowledges that people do not simply experience the world in a narrative way but use different senses as well. Humans also express their thoughts and feelings in multiple modalities, Reavey (2020). In keeping with the emancipatory and exploratory aims of this research, the researcher opted for a multimodal analysis to ensure data was analysed inclusively, which would also provide greater richness and depth.

3.6.1.1 Photo-Elicitation

Photo-elicitation is a widely accepted method of using photographs to elicit verbal data for further analysis (Boucher, 2017; Busso, 2020; Willig, 2013;), and promoting greater agency of participants (Fawns, 2020). The researcher met with child participants and their parent/carer after completing of the three data collection activities. The purpose of this meeting was to share with the child and their parent/carer visual images of the work the child produced in each of their three data collection activities with the researcher. This was done as a means of dynamically co-constructing understanding. The researcher made

this as participatory as possible by leaving space for the participants to inhabit, giving them the agency to move in any direction that the visuals took them. This allowed the child to add further comments if they wished, but also allowed for their parent/carer to further add meaning, in a way that was meaningful to them. Although some prompts were used, the researcher was mindful that this was a session for the participants and encouraged them to lead.

The co-construction meetings were video recorded and transcribed, to allow for analysis. See 'transcription' section 3.6.3 below for further information. The transcripts were then analysed using RTA (see below).

3.6.2 Reflexive Thematic Analysis

Analysis of the data was undertaken, using the six-steps methodology of RTA set out in Braun & Clarke, (2022). (See table 3, below for the 6 stages of TA).

Table 3:

Phases of Thematic Analysis, taken from Braun & Clarke (2022).

Phase	Description
1: Researcher familiarises themselves with the data	Transcribing the data, reading and re-reading the data, noting down initial ideas.
2: Researcher generates initial codes	Systematically coding interesting features of the data across the entire dataset, collating data relevant to each code.
3: Researcher searches for themes	Collating codes into potential themes, gathering all data relevant to each potential theme.
4: Researcher reviews themes	Checking if the themes work in relation to the coded extracts (Level 1) and the entire dataset (Level 2), generating a thematic map of the analysis.
5: Researcher Defines and names themes	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.

6: Researcher produces the report	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back to the research question and literature, producing a scholarly report of the analysis.
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Through coding, RTA allows for meaning to be captured at different levels. Analysis was undertaken both at the semantic level, that is taking the participant's words at face value, as well as at the latent level, where the researcher added their own meaning at a deeper level.

3.6.3 Transcription

Video recordings from all data collection activities and SSIs were saved anonymously as described in the RDMP (See Appendix P).

Transcripts used in TA need to be a rigorous verbatim account, that retains all the information in a way that reflects the original nature (Braun & Clarke, 2006). The data collection and SSI videos were transcribed verbatim by the researcher into written data transcripts, using an orthographic notation guide (Braun & Clarke, 2013), which was selected for its simplicity to ensure that transcription was consistent and accurate. Transcriptions were made within two weeks of the interview, to ensure that they were fresh in the researcher's memory. The pictorial data generated were inserted into the transcripts where appropriate, to allow for a thorough analysis with added context.

All transcripts were anonymised, using pseudonyms that participants either chose themselves, or were chosen by the researcher to protect anonymity. During transcription, all other identifying information was removed from the transcript, such as school names, the name of family members, friends or professionals, identifying geographical data (such as the name of the Local Authority or hospital trust).

3.6.4 Coding

Manual coding was undertaken by the researcher. RTA values coder subjectivity and sees this a strength of this method of analysis (Braun & Clarke, 2022). As such, inter-coder reliability checking was not undertaken.

To code systematically, the researcher coded all the child data collection activities first, moving from the transcript for P1 to P2 to P3. Following coding of the child data collection, coding was undertaken of the co-construction feedback meetings, then parent interviews and finally staff interviews, moving recursively throughout the whole dataset as coding evolved. (See Appendix Q for a sample of a coded transcript)

3.6.5 Underlying Theory and Conceptual Framework for Analysis

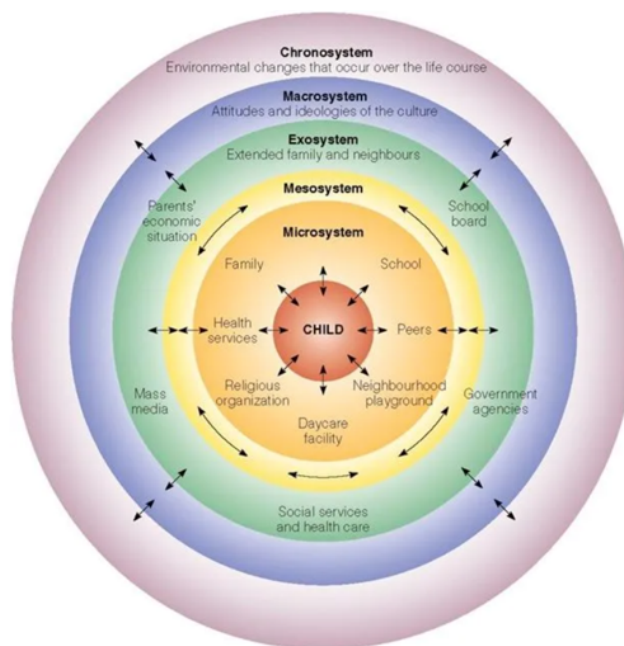


Figure 4: Ecological Systems Theory, (Bronfenbrenner, 1979)

Whilst several theories underpin this research, as set out in section 1.7, Underpinning Theoretical Frameworks, the analysis of the data was undertaken using Ecological Systems Theory (Bronfenbrenner, 1979) as the guiding theory. (See figure 4 above for a representation of this theory).

This theory was selected as the participants each inhabited different systems relating to the child

3.7 Ethical Considerations

3.7.1 Ethical Approval

As this research sought to obtain the views of young children, along with parent/carers and school staff, ethical issues around power, participation and informed consent were considered, with special consideration of the additional vulnerabilities associated with having a disability.

Prior to commencing the research, ethical approval was sought from the University of East London School of Psychology Research and Ethics Committee in March 2021, with submission of detailed plans of the research. Ethical approval (without need for amendments) was granted, (See Appendix R). In addition to this, the proposed research was discussed with a Senior EP within the Local Authority where the research was planned to be carried out. The researcher had an enhanced Disclosure and Barring Service check and had attended annual Safeguarding training within the Authority as part of their role as a TEP.

3.7.2 Informed Consent

As set out in the BPS Code of Human Research and Ethics (British Psychological Society, 2021a), the researcher produced thorough participant information and debrief sheets for adult participants (see Appendix S), to ensure that consent was informed and therefore valid. Information was given about the aims of the research, what it would include for parents, staff and children, how confidentiality and anonymity would be maintained, data storage protocols and participants' right to withdraw without consequence.

3.7.3 Consent and Assent

In this research, parents/carers had to first consent to their child taking part, making them a gatekeeper for their child's participation (Coyne, 2010). Coyne sets out several potential problems with this gatekeeping, namely that parents could block their child's participation, that parents could persuade the child to consent or that the child might agree to consent to please their parent/carer. The researcher needs to address power and positioning so child participants can see themselves as a "free agents" (BPS, 2021a, p.16), who can choose whether to participate or not. In an attempt to do this, an information and consent booklet was produced for child participants, using simplified language supported by pictures, to explain the research and provide sufficient information to allow the child to give their informed consent (see Appendix T).

Researchers must also look for non-verbal indicators that a child is uncomfortable with participation or has withdrawn their consent (BPS, 2021a). To understand how this might look for each individual child, the researcher met with each child's parent and teacher prior to starting data collection, to draw up a personalised assent plan (see Appendix U). This was done to ensure each child would be able to give and withdraw their consent, regardless of their cognitive or language abilities, considering the additional vulnerability of having a disability. Direct consent was sought from child participants prior to starting each data collection activity, by asking children verbally or by asking them to point to a green smiley face, to indicate that they wished to participate or red sad face, to indicate that they did not want to participate. For those that were unable to comply, their assent plan was referred to assess whether to continue or not.

3.7.4 Confidentiality and Anonymity

To ensure that participants remained anonymous, all participants were offered the chance to pick a pseudonym; all data was pseudonymised at the point of transcription. Confidentiality was maintained, by following a stringent research data management plan, (which included encrypting recorded data, using password protection for participant information, use of secure university

OneDrive and back-ups on an encrypted external hard drive). It was made clear to participants that the data would be discussed through supervision and that findings would be reported, including anonymised/pseudonymised excerpts from individual interviews to illustrate findings. Safeguarding was also discussed with participants to ensure that they were aware that confidentiality would be broken, should there be any concerns about the wellbeing of a child or adult arising throughout the course of data collection. This is in line with the BPS Code of Ethics and Conduct (BPS, 2018).

3.7.5 Incentives

A £10 voucher for an online retailer was offered as an incentive for participation. Vouchers were provided to parent/carers who successfully took part in the research with their child. This was in recognition of the time parents and their children gave to participate and to thank them for their contributions. The researcher recognises that in the same way that parents were gatekeepers to their children's participation, they are also gatekeepers to their child receiving a portion of this incentive.

Whilst schools undoubtedly gave more time to support data collection, and involved several practitioners, it was not possible to offer financial recompense in the same way as families. An alternate offer to provide training or similar was considered, but when schools were approached, they were happy to take part without this incentive.

3.7.6 Trustworthiness

Qualitative and real world research is messy and by its very nature cannot be held to the same scientific measures of replication and generalisability that is sought after in quantitative research. There is disagreement within this field of how trustworthiness can be measured, with the notions of reliability and validity being particularly divisive (Guba & Lincoln, 1985; Morse, 1999). It has been proposed that in order to ensure that qualitative research is trustworthy, then we must consider threats to validity, the issue of bias and rigour and generalisability (Robson, 2016).

3.7.6.1 Threats to Validity

To mitigate threats to the validity of the research, video recording of all data collection activities using Microsoft Teams was undertaken to ensure that valid transcriptions were made. Video recording all data collection assisted the researcher to develop familiarity with the data, to aid analysis. Espoused theory has been clearly introduced in Chapter 1: Introduction, to ensure that the theoretical underpinnings of this research are transparent. Similarly, transcription was undertaken using a notation guide, and analysis followed the six stages set out by Braun & Clarke, (2022).

3.7.6.2 Bias and Rigour

The use of a mosaic approach allowed for triangulation of the data collected, which contributed towards the overall rigour of this design. The mosaic allowed collection of strong data, including 'first-hand' from children through the video recordings of them completing their activities and the visuals they produced. Data collection took place over time, with the support of a familiar adult, which further increased its trustworthiness (Robson, 2016). This was then triangulated with accounts from adults who knew each child well; their parent/carer and member of the school community, and in the co-construction meeting with the parent/carer and child. The researcher used this triangulation and co-construction to understand each participant's perspectives of reality, in alignment with their critical realist ontological standpoint.

Following established frameworks for RTA (Braun & Clarke, 2022) and keeping effective notes, drafts and reflective logs meant that although coding and theme generation was subjective, it was transparent and replicable. Also, by using RTA, the researcher made transparent their philosophical underpinnings throughout, making it clear how their beliefs impacted on the production of themes and the overall knowledge produced.

3.7.6.3 Generalisability

Qualitative data is not generalisable in the way that quantitative data is, given the subjective accounts given by participants. As described in section 3.3.3 Researcher's Position, the researcher held a critical realist ontological and subjectivist viewpoint for this research which is firmly set within the interpretivist paradigm. The researcher believes that each participant presented their own contextually located perspectives of the phenomena discussed, and that through the process of research, meaning was ascribed to these by the interaction of the researcher and the researched, shaped by each's own experiences. As such, this research does not seek generalisability with a wider population, it instead focusses on the perspectives of the individuals involved.

3.8 Reflexivity for this Research and this Approach

Personal reflexivity considers the impact of the researcher's values on the research and the knowledge that is produced. Functional reflexivity is concerned with how the research design and methods impact the research and the knowledge produced. The researcher is a member of the Lesbian, Gay, Bisexual, Transgender and Queer+ (LGBTQ+) community. As a white, cis, queer, neurotypical woman, the researcher is aware of their privileges and considers themselves to be an ally to the neurodiverse and trans+ communities. The researcher has links with the trans+ community through social networks and shared community spaces. The recent controversies in the media have further highlighted to the researcher the huge discrimination and marginalisation that still exists towards the trans+ community. Whilst concern for these injustices brought the researcher to this topic, the researcher recognises their own position and potential bias as a result.

To bracket off this personal experience and limit the impact on the research, the researcher began a reflexive journal at the point of conceptualising the research, to allow for exploration and challenging of preconceptions. During the data collection stage of research, the researcher utilised video calling to observe both their own and participants' body language and used memos about both the process and their observations. The interview schedules used allowed

for exploration of participant's cultures and values. The journal was then used to explore feelings around these. Similarly, during the iterative process of analysis, the researcher further utilised memos and the journal to critically examine the researcher's views, and consider possible alternative narratives, using intersectionality theory (Crenshaw, 1989). Reflexive discussions with the researcher's supervisor further reduced the risk that the data would be skewed by the researcher's own values and experiences.

3.9 Chapter Summary

Chapter three set out the aims of the research undertaken, the research questions and then describes the ontological and epistemological frameworks around this research. The different methodologies considered were outlined, and decision making around the methodology was described. The collection of data was detailed, including information on participants and the overall mosaic. The process of data analysis was then described. The chapter ended with ethical considerations and the trustworthiness of this research.

CHAPTER 4: Findings

4.1 Chapter Overview

This chapter will set out the findings of this research study, identified through qualitative analysis of the data collected. Details of the mosaic and the full dataset can be found in Chapter 3, but a summary of the process is provided, along with the underlying theory used, before the five overarching themes identified are presented in a thematic map. Each theme, with related subthemes, are further broken down into individual thematic maps, which allows for discussion and interpretation of each. A full list of themes, subthemes and corresponding codes can be found in the appendices. The chapter will then conclude with an overall summary of the whole dataset.

4.2 Qualitative Analysis

4.2.1 The Data Mosaic

The mosaic of data consisted of both oral and pictorial data obtained through each of the data collection activities with children, parents and members of staff, as outlined in Figure 3, below.

Figure 3: Breakdown of mosaic of data

Participant 1: Bob	Participant 2: Ava	Participant 3: Suri
<ul style="list-style-type: none">• Picture sorting & scaling• Gingerbread• Show & tell• Parent & child co-construction• Parent Interview• Staff Interview	<ul style="list-style-type: none">• Picture sorting & scaling• Gingerbread• Show & tell• Parent & child co-construction• Parent Interview• Staff Interview	<ul style="list-style-type: none">• Picture sorting & scaling• Gingerbread• Show & tell• Parent co-construction• Parent Interview

4.2.2 Process of Analysis

Deductive RTA allows for the theory to be used to explore the dataset. It also allows us to recognise the conceptual ideas that we bring to the project, bringing them to the foreground of analytical priority through interpretation of the data (Braun & Clarke, 2022).

The six stages of TA were followed, as set out by Braun & Clarke, (2022). The researcher transcribed each recording, including the relevant pictures alongside the transcribed text to provide context. Familiarity of the data was achieved by this process, and simultaneously reading the transcripts whilst watching the videos.

The data was then coded semantically and latently, where appropriate to do so. Ecosystemic Theory (Bronfenbrenner, 1979), provided the theoretical framework for this. The dataset was coded as a whole, working systematically through each participant's transcript for an activity, for example, child data collection for P1, P2 then P3 followed by co-construction feedback meetings for P1, P2 then P3 and so on. The codes evolved and themes were generated across the whole dataset through triangulation between child, parent and staff participants.

Through this process, five overarching themes were identified, which encompassed thirteen subthemes. See Appendix V for the overarching and subthemes identified in this project, with corresponding codes.

4.2.3 Participant Key

Table 4, below, provides a key relating to the quotes used in section 4.3, Identified Themes.

Table 4:

Participant Key

	<i>Participant 1</i>	<i>Participant 2</i>	<i>Participant 3</i>
<i>Child</i>	Bob	Ava	Suri
<i>Parent 1</i>	Carolina	Amanda	Rachel
<i>Parent 2</i>	-	-	Nick
<i>Staff member</i>	Özge	Melissa	Maya

4.3 Identified Themes

A thematic map of the overarching themes can be found in Figure 5, below.

The data relating to each theme included pictorial data generated from the three activities completed with the children, their transcribed speech, along with their contributions in the co-construction meeting. Triangulations from both the parent and staff interview were also included.



Figure 5: Thematic map illustrating the overarching themes of this research

4.3.1 Theme One: The Child's View of the World



Figure 6: Thematic map for theme one

The theme of how the child views the world is the central theme identified within the data, in line with Ecological Systems framework (Bronfenbrenner, 1979). The data related to this theme included pictorial data generated from the three activities completed with the children and their transcribed speech, along with their contributions in the co-construction meeting. Triangulations from both the parent and staff interview were also included. The pictorial data and the supporting words from the children focussed on gender stereotypes and their own experiences. From triangulation with the key adults, further topics featuring the children's rigidity and their need to avoid ambiguity were discussed, along with the children's shared interests. Through deeper engagement with the data, two clear subthemes were identified; *Making sense of a world that isn't 'black and white'* and *how they see themselves and others*.

4.3.1.1 Making Sense of a World that isn't "Black and White"

Across the mosaic of collected data, the importance of sense making and the processes by which the participating children do this was discussed. The need for, and children's ability to follow a clear set of expectations was spoken about by several participants,

Özge: *"I think in regards to being a good friend, I think it's just because he wants to do the right thing and as in must follow the rules".*

Amanda: *"... 'Mum I can't go to Albert's room' because he's there', so at least I think she knows something, he's the male and if he's there I can't just go to her-his room like that but my one, she comes in any time she will just burst in like 'HELLO!'"*

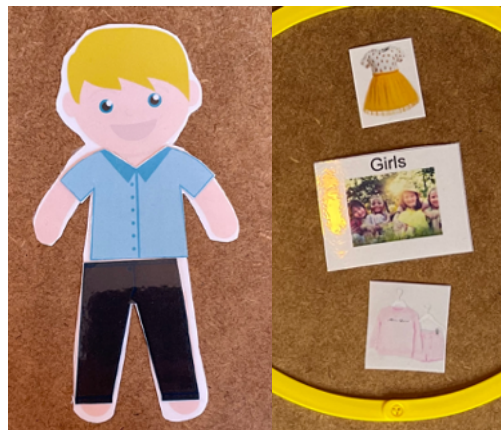
Along with the need for clear rules, the adherence to common social norms was evident in all the children's responses. For example, pink is for girls and blue is for boys. Bob mentioned directly that blue was for boys.

Bob: *"The blue shirt and like probably for boys"*

Researcher: *"Okay, blue for boys. Mmm, I've heard that before"*

Interestingly, each child selected the same blue button up shirt in the gingerbread activity asking them to dress a boy (from a selection of 22 items, 6 of which were tops). They also each selected the same two outfits for girls to wear when sorting pictures; a baby pink jumper set and a yellow dress, further demonstrating that girls wear pink, dresses are for girls, and that some things are very easy to categorise.

Bob:



Ava:



Suri:



Figure 7: Results for gingerbread boy and clothes for girls

One way in which the children seemed to be making sense was through their own experiences, where they could make direct comparisons to their own experiences or make links with people they know, which facilitated picture matching, scaling and gingerbread person activities.

Bob: *“And the scooter is at number 5 [equally for boys and girls], cos I often see girls with scooters – and I have one myself”*

Researcher: *“Okay what did you choose for boys only?”*

Bob: *“The golden Infinity Stone hand, by the way I have a Lego one of those in my Lego Avengers advent calendar.”*



Figure 8: Bob's gingerbread boy

Researcher: *“Why did you choose this one?”*

Bob: *“Because that’s what a business man would wear. That’s what a boy would wear”*

Özge : *“... it’s probably what he’s seen from his experiences, so he’s placed those there because I remember he spoke about himself but he’s also seeing other girls so it’s what he’s visually seen, I believe and he’s putting those down for what he’s experienced.”*

However, it was clear that some things aren’t easy to put into discrete categories, and key adults felt that ‘grey areas’ were particularly difficult for the children to process, which often lead to some discomfort.

Rachel: *“We had the conversation about Ellie [Suri’s sister] being girly and Ellie was saying she didn’t want to wear dresses cos they were girly and Suri said ‘but no boys can wear dresses, boys are allowed to wear dresses’ erm and that was a big conversation you know with them both like ‘boys can’t wear dresses’ ‘boys can wear dresses, most of them don’t but they are allowed to wear dresses and it’s fine’ so erm ‘so how can it be girly if boys are allowed to wear dresses, it doesn’t make sense’ so that sort of confusion there over ‘oh hang on a minute I thought it was this but now it’s- it’s not...”*

Rachel: *“So I went back to it, so I read it with Ellie [Suri’s sister] (pause) and you know it’s brilliant and at the end she*

was really cross, but the first page Suri was like 'Is Tyke a girl or boy, Is Tyke a girl or boy?' 'cos she couldn't..., she didn't know how to deal with it."

Bob: *[Concerned facial expression, upon realising that he selected a denim skirt rather than shorts for his gingerbread person to wear] "Well, well one quick question. What's that [sic] blue shorts?"*

It also seems that inflexible thinking and difficulties generalising, associated with autism may have impacted on the children's sense making. Rachel and Nick, Suri's parents felt that she selected some toys as being for boys, despite owning them herself. They wondered if a difference in colour contributed to this, with Suri not perhaps being able to generalise a yellow scooter as being something that girls could play with, as her own one is pink.

Researcher: *"And then the scooter she's put slightly more for boys"*

Nick: *"She's got a scooter!"*

Rachel: *"Yeah, I'm wondering if it's colour on the scooter, it's yellow, isn't it?"*

Researcher: *"What colour is her scooter?"*

Parents: *"Pink! (laughter)"*

4.3.1.2 How They See Themselves and Others

Each child's biological sex and gender identity was discussed by each parent of the participants, with each parent indicating that their child has a clear sense of this.

Carolina: *"...so he does refer to him as a boy he's very much aware that he's a boy."*

Nick: *"I said, 'Well you can play as well' and she says, 'Oh only boys can play football' I said 'No, no, girls can play as well'."*

Amanda spoke about Ava's awareness of the differences between herself and her older brother, Albert.

Amanda: *"...so at least I think she knows something he's the male and if he's there I can't just go to her-his room like that but my one, she comes in any time she will just burst in like 'HELLO!' "*

Both Suri and Ava's parents mentioned motherhood, suggesting that both girls had thought about their futures as adult women and potentially as mothers, further demonstrating their awareness of the stereotypical expectations put on women as mothers and home makers.

Amanda: "...she was just telling me 'Oh mum when I grow I don't wanna have children, (?they're a headache?)'."

Rachel: "She's terrified of having babies!"

Interestingly, Rachel also spoke about how Suri uses game avatars to express herself, choosing a character who is female, which is in alignment with her own gender identity, but also a princess, which is in alignment with one of her areas of interest.

Rachel: "They always used to play it as Princess Peach, didn't they? I remember that"

Nick: "Yeah they chose the girl characters yeah."

Having friends of the same sex and sex-segregated play in the school playground is something mentioned as a norm by the school staff interviewed, for all children, whether neurotypical or neurodivergent. Bob and Suri's close friends seem to be mostly of the same sex as they are, although they seem to have friends of all sexes, on which they may have based some of their decisions in the activities.

Researcher: "Why did you choose those for girls?"

Bob: "Because one thing I know that [classmate's] favourite colour is pink."

Rachel: "Phil is a boy, that's her cousin".... "He wears very similar to what they boy was wearing, wasn't he?"

Nick: "Yeah, yeah"

Nick: "Yeah Phil would wear that, wouldn't he?"

Rachel: "...Cos like Ringo, a boy in her class loves superheroes so (pause) superheroes would go with boys because Ringo likes it..."

The child participants' self-awareness and sense of self was something spoken about by all the adults who participated in this research. The adults discussed how the children perceived themselves in comparison to their peers. Amanda discussed Ava's low self-esteem around her learning abilities, showing that she is aware of the additional support she receives from adults in class. It is important for Ava that she feels the same as her peers, rather than different.

Amanda: *"Sometimes at school when they give her support she doesn't actually like it, she says 'Mom the teacher thinks I'm dumb why is she always with me?'"*

Amanda: *"..Even when she would- she would like to do what everybody are doing she just doesn't like to do something different."*

Bob's drive to fit in with his peers was also shared by Carolina, who mentioned Bob's new interest in his appearance, with her feeling that he is beginning to care about what the other children think of him. Whilst suggesting that he might not be easily swayed by others' opinions, his member of staff also highlights that Bob has a strong sense of his own preferences.

Carolina: *"He was saying 'how dare you put that Tails hat on!'",
" ...don't make me wear this in public, I'm a 10 year old boy!"*

Özge: *"...and he knows what he likes he's got definitely a strong- he's strong willed and he knows what he likes..."*

4.3.2 Theme Two: Self-Expression Through Hobbies, Play and Interests

The theme of hobbies and play was prevalent in the data. Through the process of data analysis, four subthemes were generated within this theme, (see Figure 9, below). Some of the topics discussed were around the attributes given to the children by others, how this linked to their play and passions, and how these compared to other children.



Figure 9: Thematic map for theme two

4.3.2.1 Gendered Expectations Around Play

From the picture sorting activity, the similarity in responses suggests that there are clear gendered play expectations that are felt by autistic pupils; some toys are for boys, some are for girls, and some are suitable for all children. Bob, Ava and Suri all answered identically, except for the slime, which Ava and Suri thought was a girl's toy, but Bob felt that any child could play with. (See Appendix W for a table of results from the picture sorting and scaling activity and Appendix X for the results of the gingerbread activity).

Common themes that emerged from the gendered expectations are around play, included girls playing with princesses and boys playing with superheroes.

Researcher: "And what about the girls?"

Bob: "Princess unicorn thing"

Suri: *"Like when I was three I used to love princesses. So when we went to the Disney shop, I found Elsa and Ana. Ellie [Suri's sister] said she didn't want one and then I said I want one and I just took Ana."*

Bob: *"Now this one is the easiest one out of all of them because they're all for boys"*

Researcher: *"Ooh so what number will you give-"*

Bob: *"10!"*

However, for Suri, owning a toy or having an interest typically meant for the opposite sex did not mean that she would report that the toy was suitable for all children. In the picture sorting activity, she identified the typically masculine toys as for boys, despite owning one and reportedly enjoying playing with one of them herself. This suggests that for Suri, ownership does not denote suitability, and that she is able to separate ownership from the intended audience.



Figure 10 : Suri's toys for boys

Researcher: *"So for boy's toys it was the Marvel thing so Hulk, I don't even know what that glove is, it's got Infinity stones in it, that's all I know, and a little like monster truck remote controlled car"*

(Laughter)

Nick: *"It's quite interesting cos Suri has actually got a car...", "...We got it from Hamley's quite a few years ago for Christmas and she really liked it"*

4.3.2.2 But if You Like it You Should Play With it

The children reported with their scaling activities that some toys are acceptable for all children to play with, although they are mostly for boys or mostly for girls, such as Sylvanian Families which all children identified as mostly for girls, and a scooter, which the girls identified as mostly for boys.

Ava: *"I think more of a boy's toy"*

Özge: *"Okay, so how much more of a boy's toy?"*

Ava: *[places card]*

Özge: *"She's put it to seven".*

Researcher: *"I thought it was really interesting that you said the Sylvanian Family should get a score of 0.9. (Pause) So it wasn't a zero and it wasn't quite a one (pause). What made you think of that score?"*

Bob: *"...the fact that some- only just some- like only one boy or like some boy[s], like a brother might play as well."*

Researcher: *"Ah I see. So maybe the sister might have the set but the – the sister's got a brother and the brother might sometimes come and play with them"*

Bob: *"Mm hmm. Yeah, well play with the sister"*

Bob was able to offer the insight that whilst Sylvanian Families are for girls, there is very small chance that the brother of a girl who owns the toy might also play with the toy as a way of playing with his sister. For Bob, it seems that whilst there are rules about toys and who should play with them, ultimately things aren't that binary. He went on to talk about people following their play interests.

Bob: *"Well the Dobbie toy... is something that anyone who likes Harry Potter would like be allowed to play with that."*

Some toys, however, had divided responses from the children. The remote controlled car, for example, was reported as a boy's toy by both Bob and Suri, but Ava rated it as more for girls.

Ava: *"Maybe this one is like further two- number three for boys and girls."*

Ava's verbal description denotes that she feels that boys and girls can play with remote control cars, whilst her rating suggests that it is more for girls. However, she did appear to have some difficulties with understanding the numbers on the scale.

4.3.2.3 Curating Their Own Passions and Wider Interests

From the Show and Tell activity, a common trend emerged with two of the three children discussing their passions, which for Bob centred around computer game characters (although wasn't limited exclusively to playing the games) and

for Suri was around Disney princesses. Ava did not have the same opportunity to share her passion, as unfortunately she forgot to bring something from home and instead shared a book from her class which she had not read before, but she felt might be interesting.

Suri and Bob both spoke about their drive to collect in relation to their interests, Bob in relation to Super Mario, which facilitated his ability to design levels of a computer game using concrete toys and Suri with Sylvanian Families.

Bob: *"...Since I have lots of Mario figures of the same design that's specific, then you like make actual levels so I have the question block accessories using the question blocks and I have the hold ems that's how you make it float...", "...And I have a Goomba army of the figures, I have some of the ?tube figures and I even have a little working flag."*

Carolina: *"...boxes are full of toys and there's so many out that I don't I don't know where to put 'em to be honest... It's too many... so the thing is like- he doesn't- my son doesn't wanna sell 'em he doesn't wanna give them away"*

Suri: *"Which ones do I have? I have a camper van. I have two houses. One of them's Ellie's and one of them's mine"*

It appears that for Bob, letting go of his precious things is particularly difficult, almost as if his toys are an extension of himself. Similarly for Suri, she spoke about the importance of her favourite plush Disney Princess toy remaining clean, so it doesn't need to go through the washing machine, a process which changes her doll (albeit temporarily).

Maya: *"Do you let Mommy put her in the wash?"*

Suri: *"No...like, that's why I always tell like Ellie to not take her outside like when it's dirty. Because then I have to wash her, and she gets really damp.... Yeah and her hair turned really dark brown"*

Suri spoke about her collection of Sylvanian families, and how she longs for some of the toys she has seen. When discussing her collection compared with her teacher's daughter's collection, she mentioned her envy for some of the items that the teacher's daughter owned that she did not.

Suri: *"I'm jealous now!"*

For each parent, their child playing computer games was a common pastime that they could share with others. Online games were spoken about being shared with friends, family, and also as a way to make new friends.

Amanda: *“w-w-w yeah most of them they only- most they doing [sic] games, her friends because when they are home that's what they do, they play their games online, so I don't know at school- what do they do at school. What I hear about- why [sic] I hear from them when they do it here, most of it seems what they do- just play their games, share that passion all of them- I don't know how many of them they [sic] are and they said they love the same game that they play- they will be talking and playing and laughing.”*

Rachel: *“they had Just Dance but they don't play that- that broke off, they tend to play that when cousins are here”*

Carolina: *“... for half term I have enrolled him in a camp is called Roblox camp and aims to help him build a Roblox game ... she said, ‘yeah most of the children are like around between age 10-12, he can make friends here’.”*

Özge: *“I think the fact that he's into computer games and the fact that he's into Mario- and I've got a 6 year old at home and he's into those things too- so I think that's quite a broad thing and I think he probably could- that can and does help him in a sense.”*

4.3.2.4 How Others Perceive Their Play

Play interests not only shape the children's sense of their own identity, but also provide a way in which their play can be interpreted by others. There were two main ways that other peoples' perception of them were discussed; their social ability and in the attributes given to them.

For Ava and Bob, their related adults mentioned concerns around the transition to secondary school. Ava was described by Amanda as being worried about having friends when she moves to secondary school, and Carolina wanted to broaden Bob's social circle prior to this major transition.

Amanda: *“...sometimes she's just worried about secondary school ‘mom I'm not gonna be able to make friends’ I said, ‘you will!’”*

Carolina: "...so I want him to expand to have more friends obviously because there's one more year that he's gonna have with his friends and then I think everyone is gonna go different places so he's not gonna have the same people and I would like for him to um try and make friends other than the ones that he already has you know what I mean because that's what's going to happen in the new school new high school where he goes to um that he's going to have to make new friends so I just like him that [sic] practise."

For both children, they do not have friendships outside of their immediate classmates.

Carolina: "...so that's only one friendship that he kept that is outside school."

Melissa: "I think she mainly sticks to the children in her class, the children that she's come up the school with and they're all lovely to her, the majority are lovely to her you know they've got a lot of time for her"

For Ava, friendships have not always come easily, with her member of staff mentioning that at times she can find it hard to join in with her peers in school.

Melissa: "...she can get very upset and if she feels excluded too she sometimes- I've seen her on occasion where she's wanted to join in erm a little group and they've said 'no', the look of disappointment on her face..."

Bob's mother noted that Bob's interests are now starting to diverge from his peers, who are now less interested in computer games and are more interested in playing sports, something which Bob does not enjoy. In this way, his lack of interest in sport activities means he is singled out from his peers.

Carolina: "I think most of the boys are more interesting in playing sports like you know football and basketball"

Suri, on the other hand, engages in a wide range of extra-curricular activities, including sports, Brownies and Cubs, and has a range of friends there.

Rachel: "I think she talks about her friends at Cubs more than she does at Brownies so it kind of helps her to communicate a bit more"

The attributes used to describe the children ranged from ones related to their interests, appearance and nature.

Nick: *“She’s quite adventurous like that”*

Carolina: *“Bob is definitely not into any sports although we’ve been trying to get him, he just absolutely does not wanna do it, he doesn’t wanna hear it.”*

Rachel: *“Suri is, as much as I hate the phrase, a girly girl in that sense.”*

Melissa: *“She’s got a lovely caring side... she’s very, very sweet with the younger children as well, very sweet.”*

Amanda: *“She’s very happy and her determination, that was really pushing her because even when she would- she would like to do what everybody are doing, she just doesn’t like to do something different.”*

4.3.3 Theme Three: Making Sense of Clothes, Making Sense of People

This theme relates to the how clothes and outward expression can facilitate sense-making for children. Analysis of the data identified two clear sub themes, firstly towards the traditional and accepted or normed way of dressing and the rules around this. The second subtheme identified was around more freedom of choice with clothes and breaking some of these rules. A thematic map for this theme can be seen in Figure 11, below.



Figure 11: Thematic map for theme three

4.3.3.1 Doing Clothes the Traditional Way

The data generated suggests that there are accepted rules around how people should dress. The traditional rules for dressing were discussed by several of the adults interviewed. Ava's mother mentioned that Ava had selected clothes correctly, suggesting that she subscribes to there being a correct and incorrect way to dress.

Amanda: *"No- I thought that she did well, yes, so I think she knows more than I normally think she does (inaudible) so yeah-impressed, I'm impressed actually."*

Suri's mother discussed the traditional accepted colours that she feels that Suri is aware of:

Rachel: *"...that would be girls cause it's pink, that's boys because it's blue..."*

The existence of these rules as understood by the child participants can be interpreted through the pictures produced in the clothes sorting and gingerbread dressing activities.

Figure 12: Results for clothes for boys and clothes for girls

Bob:



Ava:



Suri:



Some clothes are accepted as being for boys, some are accepted for girls, and some are accepted as unisex. Traditional views expressed were that boys wear: blue, shirts, trousers, dark colours and superheroes. Similarly, girls wear pink, dresses and skirts. Interestingly, Bob expressed that the clothes people wear should make sense, further alluding the rules around dressing:

Researcher: *"What was it that made you think that that was just for boys, Bob?"*

Bob: *"Erm the fact that it wouldn't really make any sense if girls wore that."*

The member of staff supporting him further highlighted that Bob seems to follow rules to find out whether things fit or not, for example:

Özge: *"...he thinks so logically, and he thinks about it being the wrong or the right answer even though you said it wasn't..."*

The expectations around what is considered unisex clothing can be demonstrated in the pictorial data produced in the picture sorting activity seen below:

Figure 13: Clothes for boys and girls

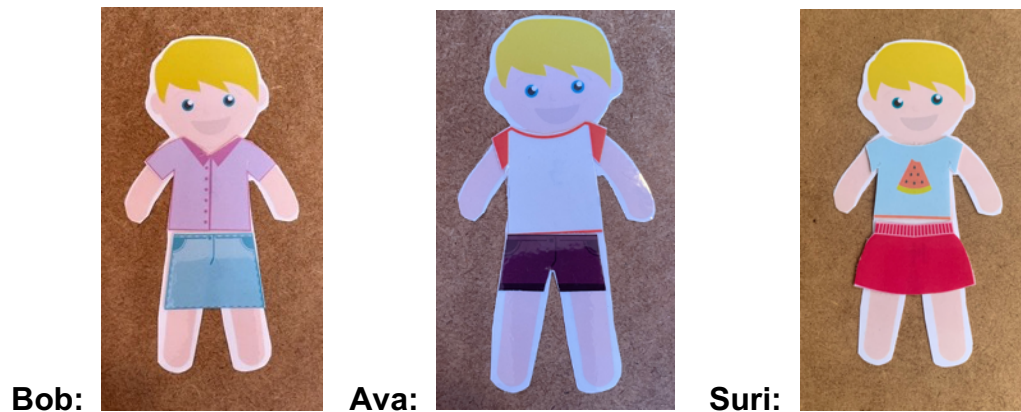


Common to each child was the belief that denim dungarees, trousers, t-shirts and stripy shorts are unisex clothing items. This would indicate that trousers, blue and bright colours can be worn by anybody. Further demonstrations of the universality of blue as a colour can be shown in the gingerbread dressing activity, where each child dressed the girl in varying amounts of the colour blue.

4.3.3.2 Respecting Self-Expression

Whilst the previous subtheme highlights rules around clothes that people can wear, the child participants offered surprising insight into the clothes that girls and boys (also described as a child) can wear.

Figure 14: Gingerbread results- clothes for boys and girls



Both Bob and Suri selected a skirt for a child of any sex to wear. As Suri did not want to participate in the feedback session, she was not able to explain why she chose a pink skirt, although during the activity, she did seek to clarify that it was a skirt, suggesting that she selected this item purposefully.

Maya: "Ok now this is a child, which clothes would you put on it?"

Suri: "Is this is a skirt?"

Maya: "What do you think?"

Suri: [places cards]

Whilst initially seeming shocked to realise that he selected a skirt for a child of any sex to wear, Bob offered some insight into his thoughts on the wearing of skirts.

Bob: "Well, well one quick question. What's that blue shorts?"

Researcher: "Well they could be shorts but I think you actually might have picked a skirt"

Carolina: ... (Nervous laughter)

Researcher: "Do you think you meant to pick out a pair of shorts?"

Bob: "Yeah, (clears throat) but I chose that because – well there's probably like some... probably... boys can probably wear skirts, I think... probably."

The fact that Bob seems to have selected the skirt in error suggests that his response may not be representative of a well-established opinion that he has. However, he seems to reason in the moment that boys can also wear skirts, although he does not seem entirely sure of this. It could be that he did not want

to get something 'wrong' or could perhaps be due to an awareness that other children have opinions on what people wear, as suggested by his mother:

Carolina: *"I think he's a bit concerned with what other children might think if he wears something that is childish."*

Whilst the idea of girls wearing trousers is widely accepted by the participating children, Suri offered her perspectives about princess clothing and her preference for a princess that dresses less conventionally.

Suri: *"She doesn't just wear a dress; she just wears like a crop top and trousers"*

Maya: *"And like that she doesn't just wear a dress? You like that she wears a crop top and trousers?"*

Suri: *"Yeah"*

4.3.4 Theme Four: The Impact of the Immediate Environment

This overarching theme encompasses subthemes that are related to Bronfenbrenner (1979)'s Microsystems of the family, school and friends, as shown in Figure 15, below, a thematic diagram relating to this theme.

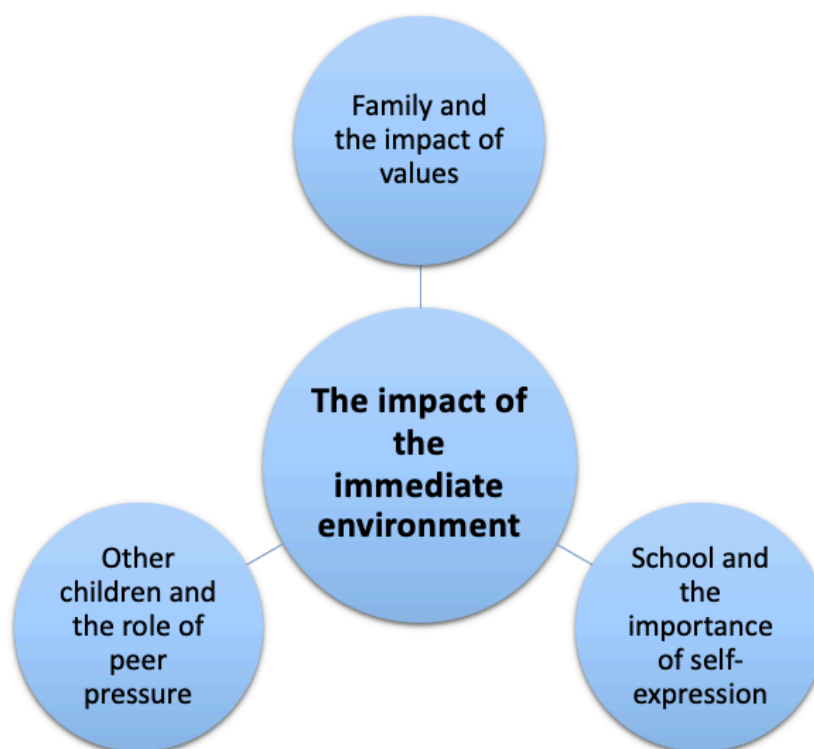


Figure 15: Thematic map for theme four

4.3.4.1 Family and the Impact of Values

Family and the impact that they have on the child was a prevalent theme throughout the dataset, which was not surprising, given the input from the parents of each child. Three main areas were discussed within this subtheme; those of parental experiences, parental values and the role of siblings. The parents that participated all had differing backgrounds, with Bob and Ava's mothers being born outside of the UK. Whilst Suri's mother is British, her father's parents immigrated from Cyprus. Each parent shared a little about their upbringing, describing the culture or cultures in which they were raised.

In this section, the quotes relating to parental experiences have been collated to provide context to how their values might relate to their formative experiences. These are set out in the boxes below, alongside the researcher's interpretations of these.

Carolina's Experiences

"Yes, so I was born in Colombia... and we were living in a small town, not in the main capital, on another city, in Santander and my parents decided to get a job abroad in Miami, Florida."

"When I was in Colombia, obviously my sister and I were raised Colombian, so you know we speak the language write the language we were brought up within the culture, the Colombian culture, which is a bit different from South America, you know what the different countries in each one they have their own little organics."

"I was growing up in Colombia obviously I was in like the midst of like changing you know from being a young girl to young woman and that happened in Miami that's you know different culture, so we did have a little bit of a cultural shock while we were transitioning."

"I think I had a little bit both influences where one was really strict, boy and girl and where the other culture of American culture is more like open minded."

"We made friends our friends made us feel not necessarily from my own country coz we had Dominicans, Puerto Ricans, we had like from all other places in South America and even Mexico, and it was just a mix of like different cultures and different thinking."

"...but obviously the one that's stood the most was my parents like the old (? way ?) and their way of thinking honestly but so that's what we gravitated towards."

Carolina had the experience of being raised in South America, before moving to the USA as a teenager, and then to the UK as an adult. She was raised by her parents, and then her grandparents when her parents went abroad to work, before eventually re-joining them in Miami. She described how her Colombian upbringing was quite strict, with strong expectations about how a girl should dress and behave. However, the USA was more progressive, by comparison, which gave her access to a range of other experiences, that she feels impacted on her values and how she views the world.

Amanda's Experiences

"I was born in D.R. Congo and that is Central Africa... .. grow up there in the capital, Kinshasa".

"Yeah... I grow up mostly with my grandmother".

"I didn't have no choice on to say where to be and where not to be, so my parents came here."

"I came to this country in 2002, and I was 13 yeah that's where I've been living ever since"

"For example, oh you have gay, you can see them, is not bad thing, but as I say in my country you don't really see that kind of thing, you don't hear about it."

"...never even knew there's other ways, like a man can become a woman or a woman can be coming man or feel like one..."

"Growing up that's all I knew about you know, a male and a female."

"I just see the same way as the female gender being the female and the male that's all I know."

Amanda was born in Africa, where she was raised mostly by her grandmother, with a strong emphasis on the traditional gender roles and heteronormative relationships within her culture. She moved from Kinshasa to London with her parents as a young teenager, and despite being exposed to a different culture and different ways of thinking, she feels that her opinions on gender identity have largely remained the same from the way she was brought up.

Rachel's Experiences

"My Dad's from Manchester and Mum's from Portsmouth,.. met in London, moved to London 70s, 60s- 70s and yeah, I've lived here as- well apart from university lived here ever since."

"And my dad's always been really, my dad's a feminist, it's brilliant!"

"You know my mother fought against that in the seventies and she used to tell me stories about how [the men] always go to the pub and [the women would] be sat at home."

Rachel shared that she was born and lived in the UK her whole life, with her parents also being British. She spoke about her parent's progressive views, and how she was parented, with her parents subscribing to feminist schools of thought, something that she has brought into her own parenting style.

Nick's Experiences

"My family are from Cyprus, so they came over in the 60's."

"I mean they had like relatives ...basically and family, it wasn't like they had friends, so they sort of come [sic] from Cyprus to over here that I had this massive like family"

"So yeah, we was [sic] always together like the cousins was all basically together all the time and yeah it was lovely"

Rachel: "...thinking about your family and they kind of you know the after dinner- the traditional women will go and wash up and the men or sit on their back sides or play football."

Nick was raised within a Greek Cypriot household in London, with he and his siblings being born in London and surrounded by a large extended family and the wider community. His upbringing was described as in line with the culture, with an emphasis on traditional gender expectations.

Summaries of the parent's own experiences have been shared as the way in which they have chosen to parent their children in many ways correlates with the type of upbringing that they had.

Carolina: *"Not just me, my sister as well, and that's how she is bringing up her kids as well- how I'm bringing up Bob."*

Parents who had experienced more traditional experiences seemed to hold more conventional values, such as gender identity being a binary, LGBTQ+ identities being 'not normal', women being maternal and encouraging their child to have gender-typical interests.

Amanda: *"I believe in genders: male and female".*

Carolina: *"He was just a normal boy and he decided to move to New York and then we didn't see him again, but he did keep in touch with some of our other colleagues and I found out then that he went to [the] other side and he was completely dressed [as a] girl."*

Carolina: *I think within us we have that like motherly nature, and we took over the role like easily*

Carolina: *"I have enrolled him in a camp [that] is called Roblox camp and aims to help him build a Roblox game"*

Parents who had more liberal experiences seemed to have a more progressive stance in parenting, for example, actively challenging expectations around gender, discussing different gender identities and challenging sexism.

Rachel: *"...cos I can remember when my niece was born walking into (pause) Mothercare and making a conscious decision I wasn't going to buy pink and having to hunt for things."*

Rachel: *"I remember Ellie's [Suri's Sister] homework that one time and she had this awful homework about... 'my mum's a superhero, she does the washing and the cleaning, and she even got a spider out of the bath!' and Ellie was just like 'what are you talking about spiders are scary?' and 'Ah, sexism Ellie, come on!'"*

For Suri, gender identities are spoken about at home. Her parents shared that despite feeling the need to categorise people and to understand whether 'they are a boy or a girl', Suri appears to have a good understanding that some people are trans+, and she seems to accept their preferred pronouns as a concrete identifier of their identity

Rachel: *"...and she was fine with that she was 'oh ok, that's fine' I think she's in the girl box because that's her identity "*

4.3.4.2 School and the Importance of Self-Expression

The discussions in this theme were around the messages that children receive from school and the staff who work within them, with staff participants sharing aspects of the curriculum that allow children to understand different perspectives, discussion of the school ethos and their perceived role in shaping children's self-esteem.

Özge gave an example of Bob's response to a homosexual kiss in a clip shown in a lesson and felt that he was very accepting of what he was shown as he had learned that in Shakespearean times that male actors would play female parts.

Özge: *"and two male actresses, I mean actors, sorry, they kissed and the fact that they were both male, a lot of the children in class were just like 'Ew two men kissed!' whereas Bob was like 'we've heard that' he was just very much like 'we heard that you know Shakespeare used to do that, male [sic] used to play the [female parts]' and it- you know, two men... what did he say 'two men kiss, well let's just get on with it shall we?' kind of just very much like it is what it is right let's just not make it a thing of it, ...So what? Basically."*

Staff cited lessons and specialist sessions delivered within the school as ways that children can further learn about self-expression.

Özge: *"then obviously we do PSHE lessons here, so he probably learns a little [there] too."*

Melissa: *"but they can play with whatever they want to play with they can express themselves any way they want to...", "You don't have to be a boy to play football you don't have to be a girl to play mums and dads."*

Both Özge and Melissa spoke about their school's ethos around self-expression, whilst Rachel shared her perspective of her experiences of Suri's school.

Özge: *"I think as a school I think we're quite good with- not- I don't- I think our message is quite clear that we're not here to*

say, 'oh boys line up boy girl boy girl boy girl' and it's just about who you are."

Melissa: "I think that you know we now at school we encourage them to play with whatever they want."

Rachel: "... the school is brilliant in lots and lots of ways and they have some lovely stuff, but they're not great, I mean they've never done International Women's Day and... like I say we've had to challenge a few things in terms of sexism..."

In talking about their role in supporting children's identity development, Melissa spoke very passionately about how she and other adults should support children to be who they want to be. She summed up;

Melissa: "I think you need adults that will encourage the children to be who they are as well, I think that's really, really important."

For Özge, it was clear that for her, she had a role to support children's freedom of expression, but also was aware that she should not push her ideals on others. When talking about Bob completing an activity, she said:

Özge: "I can't put my thoughts and- onto him because that's how it- that's who he is if that makes sense, so I wouldn't necessarily influence the way that he thinks because that's just him, obviously"

4.3.4.3 Other Children and the Role of Peer Pressure

In this subtheme, discussions were around the child participants' friends and the messages that they get from the children in their lives. Football was discussed by all the parents and one of the staff, in relation to the child participants, primarily with the children and their peers as perceiving it as a sport for boys:

Melissa: "Yeah 'you can't play football because it is it is for boys'."

Despite this, both Ava and Suri enjoy playing football in school, whilst Bob is not interested in sports.

Melissa: *"She loves dodgeball, and she actually plays football in the playground as well."*

Nick: *"They like to play football in school sometimes in the playground."*

Carolina: *"I think most of the boys are more interesting [sic] in playing sports like you know football and basketball.... Bob is definitely not into any sports although we've been trying to get him [to play them] he just absolutely does not wanna do it, he doesn't wanna hear it."*

Football serves as way of segregating play on the playground.

Nick: *"But sometimes the boys don't let the girls play... she's told me that before. I said, 'well you can play as well' and she says, 'oh only boys can play football', I said 'no, no, girls can play as well'."*

Rachel: *"With the football so the girls are kind of (pause) just doing what they can around it ... nothing's changed in ten years!"*

The sex of Suri and Bob's friends are discussed, with them both playing mostly with same sex friends, although they are friends with boys and girls.

Özge: *"Just thinking when he's outside he doesn't really- he just plays with boys mostly."*

Özge: *"he's a child [who] is happy to sit next to a girl in class and is happy to get on with doing work and doing class work with a group of girls, he's not one to moan."*

Rachel: *"Yeah, she used to play with the boys a lot more...when they were little", "...but... it tends to be, there's been sort of different groups of girls as well."*

The idea of children receiving messages from other children and peer pressure was spoken about by most of the adults, with them discussing how open or resilient they were to these messages. The comments suggested that each child was susceptible to peer pressure in some ways, but less so than others.

Carolina: *"I think he's a bit concerned with what other children might think if he wears something that is childish"*

Melissa: *"I think she would speak to an adult and have their take on it and then go back cos she would have no qualms"*

going back and saying 'listen erm I I'm gonna do what I want to do' because she is quite assertive sometimes as well."

Özge: *"...and he knows what he likes, he's got definitely a strong- he's strong willed and he knows what he likes."*

Amanda: *"Even when she would- she would like to do what everybody are [sic] doing she just doesn't like to do something different. Even at school if you give her what everybody else are [sic] doing if she's doing [something] different she won't like it."*

An interesting facet of this, was the fact that Suri grouped or rated some of the conventionally masculine toys as only for boys, despite owning and playing with some of these toys herself, according to her parents. This suggests that whilst Suri might be happy to play with a toy that was typically designed or marketed to boys, she is aware of the conventional views and perhaps does not want to admit that she plays with them, because of what her peers might say.

Rachel: *"...we are watching our way through the Marvel films at the moment"*

Nick: *"She's got a scooter"*

Rachel: *"It's quite interesting cos Suri has actually got a car"*

4.3.5 Theme Five: Gendered Messages are Everywhere in the Wider World We Live In

The Ecological Systems Model (Bronfenbrenner, 1979), describes the Exosystem, which includes the outside influences of extended family and media on the child. These relate to the two subthemes generated in the final theme; shown in the thematic map in Figure 16, below.



Figure 16: Thematic map for theme five

4.3.5.1 The Power of Capitalism and the Mass Media

In this subtheme were included comments made by Bob and Suri that indicated their possible influence from the media, along with adult comments that also suggested this. One way this was illustrated was by the desire to collect and own sets toys, marketed to them.

Bob: *“Well ... since I have lots of Mario figures of the same design...”, “and I have a Goomba army of the figures, I have some of the tube figures and I even have a little working flag.”*

Suri: *“Which ones do I have? I have a camper van. I have two houses. One of them's Ellie's and one of them's mine.”*

Suri spoke of her jealousy that other people had different Sylvanian Families than she had, indicating how valuable she perceived them to be, and the possible connection between her and other owners of the same toys.

Suri: *“I'm jealous now!”*

For Bob, holding onto the toys that he owns was particularly important, with him talking seemingly with pride about the games that he owns that are no longer available to purchase. This suggests that he feels that the scarcity indicates their value. In this respect, he is not looking for connection with those with the same toy or game, he is seeing his ownership of a rarity as being something which sets him apart from the crowd.

Bob: *"I still have the Angry Birds app like all of the apps you can't get from the app store - yeah you can't even get them anymore - yeah you can't get them even from the app store".*

Bob's mother also commented on the difficulty that Bob has in parting with toys that he has owned.

Carolina: *"so the thing is... my son doesn't wanna sell 'em, he doesn't wanna give them away."*

Interestingly, both Bob and Suri explicitly spoke about televised and print advertisements for Sylvanian Families, suggesting these toys were highly advertised at the time of data collection.

Suri: *"I've seen that on the paper. But I always wanted it, but I can't [have it]"*

Bob: *"Well, Sylvanian Families- I kind of see it as a commercial on my TV every day."*

Suri's father felt that advertising was a common influence on children, and that this was a way that they received messages about gendered roles and expectations, whilst Suri's mother made comments about how pervasive gendered marketing messages are how difficult it can be to buy things for children that go outside the accepted gender norms.

Nick: *"I think from like the media... advertising."*

Rachel: *"Cos I can remember when my niece was born, walking into Mothercare and making a conscious decision I wasn't going to buy pink and having to hunt for things."*

Rachel: *"I mean, it's everywhere, isn't it?"*

4.3.5.2 The Views of Extended Family and the Older Generations

The final subtheme generated during the analysis of the data was around the role of extended family, with particular regard to older members of the family and their viewpoints. Each participating parent spoke about members of their extended family and the influences that they have had on their families' lives, past and present. This was also discussed by one of the staff participants.

Nick: "...a big cohort that come [sic] over from Cyprus in the 60's so you know when they come [sic] over they didn't really know- I mean they had re- like relatives and friends but wasn't-not friends, relatives basically and family...." "...So yeah, we was [sic] always together like the cousins was [sic] all basically together all the time and yeah it was lovely."

Carolina: "...he has a bigger family than I do, he's got so many cousins and uncles and I've just lost count after a while, so many cousins you know. I know the ones that live close by they are the ones that I know but when we go to Cyprus it's like getting to know them 'ok who is so and so again?' and this he's got a lot of family a very big family, but you know he does have two siblings."

More traditional viewpoints from elders in the family that were discussed were conventional gender expression, sex roles, the importance of boys and expectations around play.

Carolina: "My grandmother would flip out like every time she will [sic] see like a boy with an earring she would be 'oh my gosh look at it!' "

Amanda: "Growing up, all I know was a man is a man and women is a [sic] women- as women we had certain things we need to do like growing up, like house work, you need to learn to be clean, you know, not messy that's what I knew about and then we have our men going to work [to] provide food at home. Growing up that's all I knew about you know, a male and a female."

Rachel: "When Suri was born, my mother in law stood over the crib and said, 'never mind the next one will be a boy!' "

Özge: "My dad was born in Cyprus [he's] Turkish, very erm... I suppose [he] wasn't very exposed to a lot so I was very girly you know playing- into the you know girly pink things et cetera and then my brother was like with the footballs and toys, but mum was born here"

4.3.6 Summary of Findings

Analysis of the data gathered led to the generation of five overarching themes, which can be mapped onto the ecosystems identified by Bronfenbrenner (Bronfenbrenner, 1979).

Child participants seem to draw on their own concrete experiences to help them with sense making, such as thinking about the clothes they wear or the toys they own. The children all had an awareness of the accepted norm that pink is for girls and blue is for boys, alongside dresses and skirts being for girls. Parents and staff mentioned the need for the children to follow the rules that exist, sometimes to the point of rigidity. For example, one of the female child participants owned a scooter yet said it was more of a boy's toy, possibly as her scooter was pink and the one shown was yellow. This makes it particularly difficult for the child participants when things cannot be quite so clearly delineated. One parent commented that their child found it difficult to resolve their opinion that dresses are girly with boys being able to wear dresses if they want to. Similarly, when things are not as they expect, this can make it harder for the child participants to make sense of the world. For example, one child mistakenly selected a skirt for any child to wear, believing that they had picked up a pair of shorts. When the child realised this, they looked uncomfortable, but were then able to tap into their existing knowledge about it probably being acceptable for a boy to wear a skirt.

The child participant's self-perception and how they are perceived by others was also discussed by parents and staff. All children were believed to have a concrete sense of gender identity and were able to identify how they were the same or different from their family and friends in this way. Using gender congruent game avatars and selecting same sex friends is a way of expressing their identity. However the children were not limited to interactions with friends of the same sex, which seemed to facilitate their understanding of clothes and toys that are for 'others'. In addition to gender, awareness of children's learning abilities was discussed with one parent mentioning their child's low self-esteem around learning and awareness that they receive more support than their peers

in class. This child wants to be treated just the same as everybody else, suggesting an awareness of the other children's' opinions. This was something another parent shared, in discussing how their child is beginning to take more of an interest in their appearance.

The toys that boys, girls and all children can play with were discussed, with each child having a clear idea of what toys are meant for whom. A common idea emerged that boys play with superheroes and girls with princesses. However, some toys are accepted as unisex, as demonstrated by the ratings activity, which led into the idea expressed by one child that if you like a toy, you should play with it, even if it wasn't marketed for you. Friendships were discussed, with two of the children having some difficulties with making connections with peers, with parents citing communication difficulties and differing interests as being factors feeding into this. The attributes given to the children were discussed by the participating adults were also discussed, with many relating to the hobbies and interests the children take part in.

Clothes are one way that children can make sense of people, as some clothes are for boys, some for girls, and some are accepted as unisex. In the clothes sorting and gingerbread activities, the children demonstrated their awareness of clothing 'norms and the conventional way in which we think about clothing (e.g. dresses for girls, shirts for boys). However, two of the children expressed more progressive opinions, about any child being able to wear a skirt if they wished.

Family, school and other children were discussed as factors in a child's immediate environment that can shape their thinking. Family values and parents' experiences of being parented seemed to have a profound impact on how they themselves choose to parent and the messages that they pass on to their children, with each parent discussing their traditional or more progressive childhoods. The school also has a role to play in supporting children's self-expression. This can be through the school ethos, through the delivery of the curriculum or through staff's own values. Football was a surprising discussion point, with this being a key divisive element in playgrounds, and children believing it is only for boys, despite both girls really enjoying football.

Finally, there were wider influences discussed, namely from the media and extended families. One parent described the omnipotence of messages about gender roles and expectations, in part contributed by the media. Children themselves spoke about how marketing helped them to know who toys were aimed at and sparked their desire to collect certain toys as a way to connect them with others. For one child, their collection (and the rarities within it) were more for their own gratification, with little need for this interest to be shared (despite its commonality). Older generations were more likely to hold traditional values about gender and roles.

4.4 Chapter Summary

This chapter presented the themes and subthemes identified in the data through a process of Reflexive Thematic Analysis (Braun & Clarke, 2022). Each theme and subtheme was described in detail, with interpretation added by the researcher. Thematic maps and quotes were used to illustrate the narrative of the data. This analysis will be used in the discussion (See chapter 5) to answer the following research questions:

1. What influences the development of Key Stage 2 autistic pupils' constructs of gender?
2. How does play relate to autistic children's understanding of gender?
3. What are key adults' experiences of autistic children's awareness and understanding of gender?

CHAPTER 5: Discussion

5.1 Chapter Overview

This chapter begins by using the data which was deductively analysed using RTA (Braun & Clarke, 2022), to answer each of the three research questions. Ecosystemic Theory (Bronfenbrenner, 1979), Social Cognitive Theory (Bandura, 1986) and Social Motivation Theory (Chevallier et al., 2012) are drawn upon to provide theoretical links and the findings are linked back to the existing literature. A critical review of the research methodology was undertaken, to present the strengths and limitations of this research. Implications for future research are discussed, along with what this means for Educational Psychologists. The chapter concludes with the researcher's reflections about the research process.

5.2 Applied Theoretical Frameworks

5.2.1 Theories of Gender Development in Neurotypical Children

This research draws on theories of gender development. These theories can fall into three main categories; cognitive, biological and sociological theories (Bussey and Bandura, 1999; Else-Quest & Hyde, 2021).

Biological and evolutionary theories outline that gender differentiation occurs through natural selection and the transmission of behaviours required for the male and female roles in reproduction (Bussey and Bandura, 1999; Else-Quest & Hyde, 2021). That is, the male drive to maximise the offspring produced through mating versus the female caregiving role to maximise survival of offspring are genetically driven and linked to sex differences.

Cognitive theories of gender development posit that humans learn about gender identity, gender expression and gender roles developmentally over time. Amongst these are Psychoanalytic Theory (Freud, 1964), Cognitive Developmental Theory (Kohlberg, 1966), Gender Schema Theory (Bem, 1981).

Psychoanalytic Theory has received considerable critique as it cannot be scientifically evaluated and advocates male superiority. Cognitive Developmental Theory describes a staged model of development, with organisation developing over time. Cognitive Developmental Theory says that children achieve gender constancy, that is a concrete sense of one's own gender identity, which then leads to children engaging in behaviour which is congruent with this identity (Bussey and Bandura, 1999). Gender Schema Theory has many similarities to Cognitive Developmental Theory, but only a sense of gender identity is required for children to begin development of schemas around gender roles and expectations (Bussey and Bandura, 1999). Schemas are a framework on which a person can organise information about a topic (Else-Quest & Hyde, 2021). By developing this schema over time, children learn in a stereotyped way about gender roles and expectations in relation to the culture(s) that they belong (Bem, 1981).

Social theories of gender development see the difference between the genders as a result of social construction, (Bussey and Bandura, 1999; Butler, 2006). The social cognitive theory of gender development ascertains that children learn about expectations relating to gender by observing others, and that their ability to do this is underpinned by interacting environmental and cognitive factors (Bussey & Bandura, 1999). The Ecosystemic model (Bronfenbrenner, 1979) outlines the four concentric environments that have influence on children's development. However, diagnostic features of autism include persistent difficulties with social interaction and social communication, as per the DSM-5 (American Psychiatric Association, 2013). In line with these difficulties, and related to Social Motivation Theory, reduced social orienting, reward and maintenance have been identified within the autistic population of which there appears to be an underlying biological mechanism (Chevallier et al, 2012). One possible implication of these differences is that they may impact the way that autistic children perceive messages about the social construct of gender. This in turn may mean 'sense making' of gender roles and expectations is done differently for autistic children than their neurotypical peers.

5.3 Summary of Findings

This research set out to answer a central research question, 'What influences the development of Key Stage 2 autistic pupils' constructs of gender?', along with two sub questions: 'How does play relate to autistic children's understanding of gender?' and 'What are key adults' experiences of autistic children's awareness and understanding of gender?'. By deductively analysing the data from child participants, (both pictorial and verbal) generated during the three activities, and verbal data gained during SSIs with parents and members of staff, five superordinate and thirteen subordinate themes were generated. The five overarching themes were 'the child's view of the world', 'self-expression through hobbies, play and interests', 'making sense of clothes, making sense of people', 'the impact of the immediate environment' and 'gendered messages in the wider world we live in'. These themes were then used to answer the three research questions.

5.3.1 Discussion of Findings

The themes that were generated in this research can be linked to the thematic synthesis produced as part of systematic review of the literature around gender diverse identity and neurodiverse identity development, (see Section 2.4, Thematic Synthesis). All themes were interwoven throughout each of the RQs, which are set out in the sections below.

5.3.2 What Influences the Development of Key Stage 2 Autistic Pupils' Constructs of Gender?

From the data generated from each participant, it was clear that the autistic children in this study each experienced messages about gender roles and expectations in a different way, in keeping with the critical realist ontological view that each person has their own interpretation of reality, shaped by the social, cultural and political context. Many factors make up these differing experiences, including the background of the family, experiences in school, the influence of their friends and peers, the culture(s) they live within and the messages that they receive through media and advertising. Some of these are

within the context of immediate environments that exert influence, microsystems, whilst others are wider systems that can be linked to the macrosystems and exosystems. These will be discussed below in further detail.

5.3.2.1 Background of (and Values Within) the Immediate and Extended Family

The child's microsystems give the context of the immediate environment in which they are developing (Bronfenbrenner, 1979). Their immediate family unit is one such microsystem that has a profound effect on autistic children's developing constructs of gender. Socio-cognitive theory outlines that parents create highly gendered learning environments in their home, where they can provide models for their children and evaluate the behaviour that they see (Bussey & Bandura, 1999).

From the data gathered in this study, it appears that family elders are mostly responsible for maintaining traditional values, with all parents reporting that their values were shaped in some way by the cultures they grew up within and have experienced since. For Carolina and Amanda, this led to them reinforcing traditional messages about gender identity, gendered dressing and gender roles. For others, this meant moving away from the traditional messages of the past and embracing more open messaging. For Suri's parents, the importance of instilling values of feminism, acceptance and equal opportunities were imperative.

Whilst the autistic children in this study did not directly speak of their family and own values, these can be inferred from how they categorised toys, clothes and how they shared their own personal passions. In this research, all child participants had largely stereotypical views about categorising clothes and toys. However, when able to dress a boy, girl or child from a wide range of clothes, they were perhaps better able to express their views on this. These views seemed largely congruent with those of their parents, suggesting the strength of family influence.

5.3.2.2 School Ethos and Experiences

The child's school setting is another microsystem that has direct influence on the children's sense making of gender. All three participating children attended mainstream primary schools and had never experienced education outside of the UK.

Insight about school culture and ethos came predominantly from interviews with school staff, although some parental comments also provided insight into the attitudes their children were exposed to. For both members of staff interviewed, the importance of supporting children to make their own decisions, to express themselves authentically and to respect others were highlighted. Whilst this respect and self-expression is likely in keeping with the ethos of the school, we can assume that it also is also a reflection of the staff's own personal values. However, for the parents of one participant, they felt that their child's school had outdated views, examples of which included setting homework that perpetuates harmful gendered stereotypes about the expectations of women in the home and facilitating a culture of gender-segregated play in playground games by failing to intervene at girls not being allowed by the boys to play football.

5.3.2.3 Friends, Other Children and Peer Pressure

Peers are one of the relational factors highlighted in the literature around identity development. Peers form one of the microsystems in which the child exists and receives direct information about gender stereotypes (Bronfenbrenner, 1979), and can provide social learning by way of reinforcement and sanctions for neurotypical children (Bussey & Bandura, 1999). In this study, friends and other children were only spoken about explicitly by Suri, whilst further information about the other children's interactions was gleaned from parental and staff interviews.

Challenging social experiences were a theme identified in the literature relating to identity development for neurodiverse children and young people. Chevallier et al., (2012) sets out that autistic people exhibit less social maintaining behaviour than the neurotypical population, which can contribute to difficulties

with social relationships. These difficulties have typically been seen as a result of an autistic deficit, however empirical findings support the idea that these social difficulties are as a result of a two-way mis-attunement between neurodiverse & neurotypical populations (Davis & Crompton, 2021; Milton, 2012).

Limited opportunities for socialisation (Cridland et al, 2015; De Pape & Lindsay, 2016), bullying (Cain & Velsaco, 2021; Kanfischer et al., 2017;), and isolation as a result of a lack of common interests with peers (Kanfischer et al., 2017), are common features in the existing literature. Similar experiences were noted in this study, with both Bob and Ava reported to have some degree of difficulty with making friends and playing with other children. Amanda explained that Ava is worried about making new friends when she goes to secondary school, and Carolina had this concern on Bob's behalf and so was actively trying to find extra-curricular activities where he might meet like-minded peers with whom he could make and maintain connections. The concern around friendships at the point of secondary transition is indicated in the literature by Kanfischer et al., (2017). Similarly, Carolina noted that as Bob isn't sporty, his interests were beginning to deviate from his peers, which was a significant concern for her but not the child. Whilst parents and key adults might feel that an autistic child does not have adequate social connections to maintain well-being, this may not be the case for the child; as indicated by Chamberlain et al., (2007).

However, whilst some autistic children may have difficulties making and maintaining friendships, this is not universal. Peer interactions likely contribute to autistic children's understanding of gender roles and expectations as discussed by Schott (2012), where positive social relationships are a key part of developing a neurodiverse identity. In the current research, playing computer games online was one way that facilitated positive peer interactions, along with extra-curricular activities in mostly gender-segregated play activities. One member of staff noted that Ava's classmates were very kind and understanding of her difference so this group provided a safe space in which she could socialise, and for Bob, the playground was the space that he could play. For Suri, who is reportedly very sociable, attending several extra-curricular activities provides another way to interact with her peers outside of school.

Reduced social orienting, reward and maintenance strategies have been observed in the autistic population (Chevallier et al., 2012) from which we can infer a reduction in modification of behaviour as a result of peer and interpersonal relationships. Congruent with this were discussions of resilience to peer pressure. In this study, Melissa explicitly spoke about Ava being able to choose toys or games that she wanted to play with, rather than following what the other children told her. This is in keeping with research around impression management in the autistic population (Izuma et al., 2011).

This suggests that some social messages related to gender roles and expectations are strongly noted and expressed by autistic children. The impact of peer pressure on autistic children was something mentioned by Bob and Suri's parents and members of staff. Carolina felt that her child is becoming increasingly aware of his appearance and is concerned about his peers' opinions. Whilst there was no indication of direct comments being made to Bob, this suggests an awareness of the social messages that he or others may be receiving. Similarly, Suri's parents were shocked by her responses about who could play with toys, as despite their very open attitudes at home, she replied with stereotypically gendered answers. Even when Suri owned a toy and played with it herself, she answered that it was not for girls, further suggesting the strength of peer messaging.

5.3.2.4 Cultural Norms

The culture in which a child develops is an overarching system which shapes the systems within it (Bronfenbrenner, 1979). The norms within this culture dictate how families, schools and other systems operate. The children participating in this research were exposed to several cultures, including those within their immediate family, wider family, and home culture.

Each participating child and their family had differing backgrounds, with parents and grandparents coming from a range of countries, and links to extended family in their countries of origin. All parents spoke about their backgrounds and what was considered typical for them growing up in the different cultures

they experienced. Bob and Suri's parents were explicit about the different cultures their children were exposed to at home, due to ethnicities of the children's parents and grandparents. For Carolina, it was very clear that Bob was brought up predominantly within his father's culture, due to a large extended paternal family living locally compared to the maternal family abroad. For her, it was important for her to retain her own cultural identity and to continue to expose Bob to it in different ways.

In terms of how these different cultural environments impacted on their children, Suri's parents were explicit about the conscious decisions that they made relating to parenting, that challenged some views of elders in their family. For Carolina, it was important for her to carry on the traditions of her home country.

5.3.2.5 Media and Advertising

The media is an element of the exosystem that influences children's development (Bronfenbrenner, 1979). Advertising was spoken about explicitly by Bob and Suri. For them, it was clear that this was a way that they received messages about the toys that children should play with. Bob cited adverts as showing him that a toy was for girls, whilst for Suri advertising was one of the reasons why she knew about the range of toys within a collection, which fed into her desire to own more of them. Rachel made direct reference to the pervasive impact of marketing, and how there is little getting away from these messages.

From adult interviews, it is clear that various media sources have influenced children's interests. All parents talked about their child's interests being shaped by TV programmes or computer games. Whilst advertisements may be experienced passively, TV and games require more passive decision making, in which parents can be involved.

5.3.2.6 Summary

Our current psychological understanding of autism, social cognitive theory and social motivation theory would suggest that autistic children might be less

susceptible to social messaging about gender roles and expectations. Despite having differences in social interaction and social communication skills, this research proposes that Bob, Ava and Suri learn about and make sense of gender in a number of social ways. This includes from direct environmental influences such as their family, school and peer groups, along with wider environmental influences such as media and culture. Whilst it is not possible to define which social influences have the greatest impact, the findings suggest that in this respect, this sample of autistic children in KS2 may experience gender roles and expectations in a very similar way to their neurotypical peers.

5.3.3 How Does Play Relate to Autistic Children's Understanding of Gender?

Social cognitive theories of development posit that children receive messages about gender expression and expectations from a number of social environments, as demonstrated in section 5.3.2, above. One such way that they receive and demonstrate these messages is through toys and play interests. The data gathered suggests that autistic children's own interests are shaped by social messages about play. For some children, their interests are shared, facilitating their relationships with peers. These relationships allow them to receive further messages about gender and enact their own views.

5.3.3.1 Preferred Play Interests

Learning about each child's play preferences was possible through triangulation of their responses to the toy sorting and scaling activities, show and tell, discussion with the children and the adults who know them well.

Both children who brought an item in for show and tell were able to talk about their interests; Super Mario and Disney princesses. Bob explained that Super Mario was his favourite character and that he liked to create his own computer game levels using figurines. Suri was particularly interested in Disney princesses, especially Princess Ana. For both children, whilst they have a particular special interest, this does not appear to restrict their access to other play activities, with both children reportedly engaging in a range of activities.

Play was highlighted as a way in which autistic children can make connections with their peers, and their special interests can facilitate this. Playing computer games is an interest shared by every participating child, and for Ava and Suri, it was explicitly spoken about this being a social outlet for them to interact with their siblings, cousins and peers. Whilst playing computer games seemed to be a solitary interest for Bob, his parents had found a club based around programming to help him meet like-minded children outside of school. Other ways that children had social links with their peers was through extra-curricular activities, with Suri attending Cubs and Brownies.

For the two children who were able to share their passions with the researcher, it should be noted that these interests were gender congruent with all three children's perceptions of toys. This suggests that the prominent messages about the appropriateness of toys for boys and girls may in some way shape autistic children's special interests. The activities that an autistic person engages in were highlighted as a key factor in identity development (De Pape & Lindsay, 2016; Schott, 2015). Bob, Ava and Suri each had a clear sense of their own gender identity, which was congruent with their assigned sex at birth. For them, it appears that toys are a highly gendered thing with clear rules attached, which can provide a means of expression.

Interestingly, Suri, who was interested in Disney princesses spoke about liking their personality traits, with her favourite princesses being funny. She also spoke about princess fashions, and the fact that princesses don't have to wear dresses. For her, she liked that Princess Jasmine wears trousers and a crop top. Whilst she did not explicitly express why these things that are contrary to existing stereotypes about princess were important to her, this suggests that this interest provides scope for her to learn different messages about gender expression and roles, if encouraged, by her parents or other social influences.

5.3.3.2 Gender Congruence in Play Interests

The toy sorting activity demonstrated that the participating children's views around who could play with which toys were largely stereotypical and in line with their neurotypical peers, as found in the exploration of methods. In this

activity, the one toy which divided the participants was the slime set, which Ava and Suri believed was for girls only, whilst Bob believed that both boys and girls could play with it.

The scaling activity showed more nuance in opinions from all three child participants, although it is possible that Ava did not fully understand this activity, as demonstrated by extended response times, and scaling answers which were not congruent with her sorted answers for one toy item. Whilst Suri clearly understood the activity, her responses for some items wavered also. This could suggest that for some toy items, the children had fixed ideas about who could play with them, but others were more fluid.

In this activity, a score of 0 or 10 for a toy indicated that the toy was only for girls or only for boys. These binary scores were used most commonly by Bob, suggesting that for him there are clear distinctions between boys and girls toys. However Ava did not use these polar scores at all, suggesting that she feels that whilst there are ideas about who can play with certain toys, all toys can be played with by anybody. For Suri, polar scores were only expressed for dolls, ponies, remote controlled cars and the Incredible Hulk. This suggests that for her some toys are strictly for boys or girls, whilst other toys have some degree of flexibility.

Suri's ideas of remote controlled cars and superheroes being for boys only was not something that she adhered rigidly to herself, as her parents explained that whilst Suri seemed to be echoing gender-stereotyped perceptions around play, she owned and played with these toys. As Rachel and Nick promote playing with all toys, this suggests that Suri was susceptible to pervasive social messages around play from outside of her home environment.

Strong messages in school about football being something that only boys can play with was a theme that was discussed in relation to Suri and Ava, and in being a boy's interest in relation to Bob. Interestingly, both Suri and Ava were interested in and liked to play football, despite the idea of the contrary being pervasive on the playground. Whilst the autistic children in this study did not report any gender non-stereotyped interests, this was gleaned through

triangulation with key adults. Again, this suggests that although aware of the gendered messages about this sport, autistic children may be more resilient to these, choosing to play with things that interest them, rather than what they are told that they should play with. The finding that autistic children may play with toys or have interests that are not in alignment with typical gender stereotypes are in keeping with the research of Strang et al., (2018) with autistic females realising that they did not have to be constrained by expectations around gender stereotypes. For children in this study, engaging in non-stereotyped play does not seem to impact on autistic children's own sense of gender identity.

The idea of self-expression through toys and play interests is something that Bob spoke about explicitly. For him, whilst toys might be marketed at and owned by boys, he could think of scenarios where girls might play with the toy. One such example they gave was if a boy wanted to play with his sister, he might play with her girly toys whilst playing with her. He also noted that anybody who was interested in Harry Potter could play with a Dobbie toy, suggesting that an interest in something provides qualification needed for a child to play with it.

5.3.3.3 Summary

Restricted interests and repeated patterns of behaviour are diagnostic features of autism (APA, 2013), and many autistic children have special interests or passions. Special and wider interests are a way that Bob, Ava and Suri develop links with their peers, similarly to how neurotypical children share interests with their peers. The findings suggest that these children's interests may be shaped by the social messages that they have received from others about the gender-appropriateness of play activities, as their reported special interests were all gender congruent.

The sample of autistic children that took part in this research have clear opinions on who toys are for that are broadly in line with those of their neurotypical peers. Whilst no toys were scaled unanimously as being only for boys or only for girls, two of the three participants held the same polar views

about four toy items, suggesting these items are more strongly gender-categorised.

Although the children in the sample hold strong views about gendered play, they do not necessarily follow these rules rigidly themselves, suggesting that whilst they are aware of the gendered messages, they have some degree of resilience to them. Reasons for this could be due to reduced awareness of social messages, reduced response to social reinforcements and sanctions as described in social motivation theory, or that they are receiving stronger influences or rewards from elsewhere. Interestingly, the reluctance to admit to playing with a toy marketed towards boys from one of the more social girls is indicative of their social motivation.

5.3.4 What are Key Adults' Experiences of Autistic Children's Awareness and Understanding of Gender?

Parents of autistic children and members of school staff had varying accounts of how the children make sense of gender, which is understandable, given both the heterogeneity of autistic presentation (Chevallier et al., 2012) and the researcher's critical realist view of knowledge production.

5.3.4.1 Gender Identity

The thematic synthesis of literature highlighted self-concept as the most prominent theme in the systematic literature review, in developing both neurodiverse and gender diverse identities. Whilst there is some congruence in experience between participants in this study and those in the literature review, it should be noted that this is not indicative of participants in this study being gender diverse; the similarities may be part of a neurodiverse experience.

In this study, each parent spoke about their child's sense of gender identity, which in all cases was congruent with their biological sex. Awareness of gender identity relating to themselves and others was discussed at the level of being aware of biological similarities and differences between the child and other members of their family, the child themselves clearly expressing this awareness

or in terms of the child being aware of and supporting trans+ identities. The level of awareness discussed seems to correlate with the messages shared by the parents at home. Ava and Suri's parents both spoke about how their children had raised discussions about child bearing when they were older, both having negative feelings about this. The awareness of this further indicates their awareness of their own biological sex and the gendered expectations for them for adulthood. This discomfort with gender roles and societal expectations is linked to the findings of Kanfischer et al., (2017), in relation to gender diverse autistic women.

Typical patterns of play development show that girls and boys acquire same sex friends and engage in gender appropriate play activities with them (Huston, 1983). For Bob and Suri, the sex of their chosen friends was explicitly mentioned, with these children mostly although not exclusively having friends of the same sex. This echoed staff observations of sex-segregated play amongst their neurotypical peers and further suggests the children's clear sense of gender identity.

5.3.4.2 Following Rules

Key adults feel that the children are aware of social rules relating to gender norms, such as the accepted rules around clothes and toys. These rules provide heuristics that help children to understand the world around them, including making sense of other people's gender identity or expression. The findings show that key adults feel that Bob, Ava and Suri learn these rules from many social environments, including their family home, although the child's own opinions may not always be the same as those of their parents, demonstrating either increased or decreased flexibility of responses than their parents expected. Bob appeared more open to, for example, boys wearing skirts, which shocked Carolina as they had not discussed this previously. Suri, however, demonstrated more traditional values than her parents felt were discussed in their home environment, which Nick and Rachel felt could be due to her inflexible thinking, rather than an indication of conservative views.

Adults feel that the children adhere to these rules to different degrees. This includes how the children choose to express themselves with the clothes they wear or toys they play with, perhaps due to an emerging awareness of what judgements others might make about their clothes. Whilst Suri's parents felt that she had succumbed to stereotypical messages that she experiences outside of her home, Özge and Melissa both felt that Bob & Ava were less susceptible to this peer pressure, and would instead behave how they wanted to, rather than how they felt that others wanted them to.

5.3.4.3 Difficulties Managing Ambiguity

Linked to following rules, most parents and school staff mentioned children seeing things in a binary way, with the idea that there are right and wrong answers to questions or ways to behave.

However, not all situations can have binary rules applied, and key adults report that the children cannot easily 'sense make' in these situations. Parents report that the potential for ambiguity around gender identity causes discomfort for their children. Suri, for example, can become very uncomfortable if she cannot use the accepted social rules to immediately identify a person's gender expression, which she can then find it difficult to move past. Examples of this included ambiguous character descriptions in a book, being unable to identify a person's gender identity due to their appearance or being able to reconcile that boys can wear skirts, yet skirts are considered girly. In each of these instances, Suri needed to clarify by asking. However, there were instances where Bob had drawn on his past learning and experiences in order to reason what is acceptable, such as it being OK for a boy to wear a skirt if he wanted, or a kiss between two men being unremarkable.

5.3.4.4 Summary

The participating adults described that Bob, Ava and Suri have a clear awareness of gender norms, including a concrete sense of intrinsic gender identity that is congruent with those assigned at birth. The adults felt that the child participants were able to express their gender identity with the clothes that

they choose to wear, the toys they play with and the peers they spend their time with, as would be expected for neurotypical children their age. The findings suggest that whilst Bob, Ava and Suri can use social rules to help them categorise and classify people and things, if there is ambiguity, they can find this difficult to manage as they apply these rules in quite a rigid way. In some instances, adults report that the children can think more flexibly and draw on their past experiences to reason what are appropriate expectations.

Awareness of biological differences and associated gender roles was discussed by many of the adults, with the expectation of motherhood being something that Ava and Suri are aware of and reportedly uncomfortable with.

Peer pressure to conform was discussed in relation to each child, with there being some degree of susceptibility to peer pressure for each child, but also some degree of resilience. Whilst each participating child showed strong gender-stereotyped categorisation of toys, their own play choices do not always reflect these stereotypes. Again, this can suggest that these choices might be socially motivated, much like their neurotypical peers.

5.4 Critical Review of the Research: Strengths and Limitations

A critical review has allowed a number of strengths and limitations of the research to be identified. These relate to the research rationale and design, including aspects of recruitment, the collection and analysis of data.

5.4.1 Rationale

There are social justice issues relating to being neurodiverse in a neurotypical and ableist world. The researcher wanted to understand if there is anything different about the way that autistic children make sense of gender. The rationale of this was that the existing body of research focusses on adults, older teens and tends to have a focus on causality or look at experiences of gender variance.

5.4.2 Newly Available Literature

A final systematic search of the literature was carried out in April 2022 to find any relevant research published since the original literature review in July 2021, which replicated the literature methodology described in Section 2.3, Review Methodology. One additional paper, relating to disability identity in adolescents was found that met the inclusion criteria (Forber-Pratt et al., 2021). An unpublished doctoral thesis on the experiences of trans+ and neurodivergent youth was found in the subsequent hand search (Milne, 2021). Neither of these papers were available when the literature review was completed, so could not be included, but both hobbies and the importance of peers were mentioned in both papers, linking to the current research.

5.4.3 Research Design

5.4.3.1 Participant Recruitment

One of the limitations to the recruitment of this research was the small sample size, with fewer child and adult participants recruited than anticipated. Whilst the small sample size of participants allowed for triangulation between participants, and some similarities were found in the data, all participants focussed on different elements of gender and had different experiences. This is in line with the critical realist ontological perspective, highlighting the differences in the way that autism and gender are experienced and interpreted. A larger sample size would have allowed for more interpreted realities to be shared, to help the researcher interpret the phenomenon of how the sample of autistic children make sense of gender.

This research set out to hear the voices of autistic children, and not just those with good verbal ability, given the gap highlighted by the systematic review. Whilst a special primary school for autistic pupils was initially approached for recruitment to access and amplify potentially the most marginalised voices, recruitment was unsuccessful through this avenue. Two participants were recruited through linked EPs at mainstream primaries. A third participant was recruited through the local branch of the National Autistic Society. All three

children who participated in this research attended mainstream primary schools with the support of an Education Health and Care Plan and were able to share their views verbally with the support of the pictorial resources. No potential participants whose parents expressed an interest in taking part were excluded due to the child's level of difference, yet the sample lacks diversity in terms of levels of ability. Similarly, the inability to provide interpreters means that not all adult voices were able to be heard as only adult participants proficient in English were able to participate. It should also be noted that the parents who opted to take part in this research may have done so as they had a particular interest in the topic or perhaps reflects an existing privilege in having their voice heard.

The small sample size also affected the ethnic diversity of the sample. Of the child participants, one was White British, with British and Greek Cypriot heritage, one was Black British, with Congolese heritage and the final participant's ethnicity was described as 'mixed' with South American and Greek Cypriot heritage. All participants were recruited from one LA. Whilst this means that the sample is in some way reflective of the geographical area, a larger sample would have allowed for greater diversity.

5.4.3.2 Data Collection

5.4.3.2.1 Ethics

Ethical considerations when undertaking this research were incredibly high, when working with a vulnerable population and undertaking research remotely with both child and adult participants, due to the difficulty in perceiving risk to participants, when not physically present (BPS, 2021b). The use of assent plans was a particular strength of this research, given the triangulation between parents and school to best understand how each individual child could provide assent. These proved to be particularly beneficial as one child felt very overwhelmed by the initial data collection attempt, so to maintain her comfort, the activity was ceased, in line with the assent plan, before being attempted later without the researcher. However, having a familiar member of staff to

facilitate the research in a comfortable location proved helpful for providing reassurance, mediating activities and monitoring child comfort levels.

As two of the three child participants were not yet aware of their diagnosis of autism, this posed an ethical dilemma when one of the children asked why he had been asked to take part in the research. The researcher did not explain that the research involved autistic children, as to have provided this detail could have caused harm to the child. This question and response was relayed to the parent during the parent interview to ensure that the parent was fully aware of the information given.

5.4.3.2.2 Consent

To reflect the increased vulnerability of autistic pupils to advocate for themselves, consent was first obtained from parents. Once parental consent was obtained, child information and consent booklets were shared with the parents and supporting member of staff to share with the child in the first instance, to allow multiple discussions about consent. These booklets were produced with the input of a senior specialist Educational Psychologist for autism within the researcher's placement authority to maximise accessibility.

The researcher went through these with the child to gain consent and used regular verbal and symbol check ins to make sure each child was happy to continue. The assent plan could also clearly demonstrate whether each child should continue with the activities or not.

5.4.3.2.3 Semi-Structured Interviews

SSIs were carried out with all adult participants in English. Whilst all adult participants had a good level of conversational English, speaking English as an Additional Language can be a barrier to effective communication (Marshall & While, 1994), which is challenging when undertaking qualitative research with a researcher from a different cultural and linguistic background (Marschan-

Piekkari & Reis, 2004). It is a limitation that interviews could not be carried out with participants in their first language.

However, it was a strength that each adult participant's intersecting identities, cultures and values were explored using the interview schedule, to provide context for the analysis.

5.4.3.2.4 Materials

An exploration of methods was undertaken with four neurotypical children in KS2. This exploration allowed for refinement of the data collection resources and benchmarking of which clothes and toys were for boys, girls or everybody. Whilst this provided an objective baseline, the use of resources normed using a larger sample would have been more trustworthy. It is also possible that some of their responses might have been biased, as the researcher noted that in group activities, the children's opinions seemed to be swayed by the oldest child.

The activities were designed to allow participation at a range of abilities. The pictures selected for inclusion were items that were likely to be familiar to all children. A further strength of the data collection materials was that for the picture sorting and scaling activity, resources were produced to ensure that the pictures did not include any children playing with the toys, to limit any potential bias. However, there was a potential limitation related to the gingerbread activity, as one of the child participants referred to the gingerbread child as a boy. It is possible that the short hair and underpants silhouette may have created bias in the children around the perceived gender identity of the person. Gingerbread people without hair or the presence of underwear silhouettes would have further reduced this bias.

Another limitation within the data collection with children was the reinforcement of the existence of a gender binary rather than spectrum, by using group terms 'girls', 'boys' and 'girls and boys'. Whilst these were chosen to be inclusive to children with weaker cognitive or linguistic skills, they may have limited the

children's responses and encouraged a binary response that may not have been in alignment with their beliefs.

The difficulties that one of the child participants had with the scaling activity suggests that the activity may have been too abstract. To make the activity clearer, the scale should have included descriptors for each number, along with visual/pictorial support, which would have reduced subjectivity and ambiguity around the scores.

Using paired resources was a strength of this research, as it allowed the researcher to display the tasks on screen, but also provided concrete resources for the children to manipulate. Their answers could then be reconstructed and 'played back' during the feedback and co-construction meeting.

5.4.3.2.5 Remote Data Collection

A strength of the data collection with the children was that activities were facilitated by a familiar adult in a familiar location, to ensure an additional level of advocacy. The supporting adult was able to put the child at ease and provide additional, targeted mediation where required, given their familiarity with the child and their abilities. Not meeting an unfamiliar person (the researcher) in 'real life' was likely less stressful for the children.

However, the remote nature of the data collection and the reliance on supporting school staff to set up the resources means there was likely some variance in the way that data was collected with the child participants, that could have potentially impacted analysis. The nature of individual mediation and delivery required for each child participant was a further complication, as different levels of input were required from the researcher and supporting adult for each. A particular variation came from data collection with one of the children who was so uncomfortable with completing activities with the researcher, that their data collection was carried out by a supporting member of staff, in the absence of the researcher.

5.4.3.3 Data Analysis

As the researcher held a critical realist ontological and a subjectivist epistemological perspective, they believe that the data analysed for this research are co-constructed interpretations of participants subjective experiences of gender, shaped by the social context(s) in which they and the researcher live.

The use of RTA allowed for patterns to be identified across both the visual and verbal data relating to participant experiences. However, using a dual design incorporating thematic analysis for pictorial data and IPA for the interviews would possibly have allowed for deeper understanding of the phenomena using idiography, that is looking at one case (child, parent and staff participants) in depth before exploring the similarities and difference between the others.

It should be noted that that the researcher considers themselves to be neurotypical, and as such is an outsider researcher. Davis et al., (2021) reframes the notion of autism-specific social interaction deficits as a two-way mis-attunement, which impacts each neurotype's abilities to effectively understand the other, contributing to a mutual breakdown in communication. To mitigate the risk of this mis-attunement, a co-construction meeting was attempted with each child participant and their parents. However, only one child provided further input at this stage, increasing the risk of misinterpretation of their opinions.

RTA (Braun & Clarke, 2022) provides an effective framework for a single researcher and can be used with different datasets and varying sample sizes. This and the ability to integrate pictorial data made RTA a suitable data analysis method for this research. However, for future in depth research on the topic, alternate analytical methods may provide richer data and more depth in the analysis.

A major benefit of RTA is the degree of transparency in analysis and how the research has been shaped due to researcher reflexivity. This reflexivity aims to articulate philosophical leanings, theoretical underpinnings, political alignments,

multiple identities, knowledge and experience (Elliot et al., 1999). One of the ways in which reflexivity was attempted was by reflecting on the process of analysis by using regular supervision and a research diary.

5.5 Implications of this Research

5.5.1 Unique Contribution

To the researcher's knowledge, no other research has been carried out, either in the UK or worldwide, that has explored how autistic children make sense of gender. This research used participatory visual methods and a mosaic approach to elicit the child's voice, triangulating this with the experiences of parents/carers and members of school staff. Whilst research has been carried out to gain the perspectives of neurodiverse young people, the focus has been mostly on adult perspectives and in relation to gender diversity.

This research highlights the value of using participatory visual methods with autistic children, and in using supportive adults to support with data collection in a remote capacity.

The findings from this small sample suggest that the autistic participants are aware of gendered stereotypes around toys and clothes and whilst they might use some 'rules' as a heuristic for sense making, they may not always apply these rules to their own circumstances. This further contributes to our understanding of how social cognitive learning and social motivation theory can be applied for these autistic children.

5.5.2 Implications of Findings for Educational Psychologists

EPs are uniquely placed to work at individual, group and to systemic level (Farrell et al., 2006), and in doing so can bring about change for autistic and/or gender diverse children and young people and their families.

At the individual level, the findings of this research demonstrate that visual methods can be an effective way of eliciting the voice of autistic children, which has implications for self-advocacy (SEND Code of Practice, Department for Education, 2015) and making choices about interventions (Working with autism: Best Practice guidelines for psychologists, British Psychological Society, 2021c). The success in carrying out this research remotely, with paired resources facilitated by supportive adults may be beneficial for future ways of working if EPs are prevented from having direct access to CYP.

EPs can work with schools to support staff to develop an understanding of their role in awareness of gender roles and expectations. This could be offered as training to schools, along with offering training on neurodiversity for all pupils, to foster an environment that values autistic difference. This also has implications in supporting delivery of the 'All About Me' autism psychoeducation programme.

5.5.3 Proposed Future Research

This research explored how autistic children experience and make sense of gender, triangulated with the views of key adults including parents and members of school staff. Whilst this research has provided answers to the research questions in relation to the data sample, the limited sample size and nature of remote data collection reduces the validity of the findings. Any further research should be carried out with a larger sample to further identify patterns of experience. This could be carried out with a homogenous sample, such as all girls, to deepen our understanding of the autistic female experience, given the underrepresentation of this population in the existing literature (Stenner et al., 2019).

This research focussed on children in Key Stage 2 (ages 7-11), to allow for child participants to have obtained gender constancy (Kohlberg, 1966), but without the added complications of puberty, which may lead to gender being conflated with sexual orientation. Further research could be undertaken using the mosaic approach with adolescents, in order to understand whether there is something different about the way that autistic teens make sense of gender.

As only one of the children who took part in this research were aware of their diagnosis of autism, it was not possible to explore children's feelings around their diagnosis and the impact this has on their awareness of gendered expectations. The awareness of neurodiversity and embracing this identity to reframe participants views of themselves has been highlighted as a protective factor (Schott, 2015; Stenner et al., 2019). Further research should take place with CYP who are aware of their diagnosis to include their perspective on their diagnosis on how they see the world.

5.6 Reflexivity

This research has been an intensely difficult but ultimately rewarding process. Whilst I found it easy to be self-critical, reflexivity, that is questioning my assumptions and thinking, and comparing them to those of the participants in my research posed more of a challenge. It was not easy to separate my own views and experiences from the research, the influence of which is accepted within the subjectivist epistemology. The particular challenge was when interviewing adults, as it was obvious where my own core values aligned with theirs or where they were incongruent (see Appendix Y). Along with reflexive thinking throughout, I had dedicated time for reflexivity through tutorial discussions with my supervisor and use of my reflective diary. It would have further helped my reflexivity to have a reflexive peer supervision group of colleagues who were undertaking TA at the same time.

I have grappled with the levels of child participation throughout my research, as data collection activities were restricted by remote working and the pandemic (see Appendix Z). If I was to repeat this research, I would increase the scope of data collection activities and would allow each child to select the activities they wanted to take part in from a pool. Allowing the activities to be more child led would increase participation and might enrich the data as children would be able to select the activities that were meaningful to them.

Further activities could be introduced that are more open and do not imply existence of a gender binary, which was a limitation with the design of this research (see Appendix AA). The methods were implemented to make the

activities accessible for the children and manageable for the supporting adults. One way of doing this could be to increase the levels of abstraction for more able children, which would be possible with in person activities. I would also like to ensure there is ample time between the data collection activities with children and the co-construction meeting with parents, to ensure adequate opportunity for researcher reflection.

Whilst the researcher believes the rationale for research was justified, they felt that the idea of looking at sense making was perhaps too big an area to tackle, with gender being such an abstract and complex issue. Looking at just one of the ecosystems rather than across a range might have provided a greater understanding.

5.6.1 Exceptional Circumstances: The Impact of the Covid-19 Pandemic

Data for this research was collected almost two years after the first lockdown in the UK, at a time where there were some residual government restrictions in place for people with the virus. The children who participated in this research had had significantly disrupted experiences of education and socialising, along with the associated loss of routines that arose from the periods of lockdown. The reduced access to the social world experienced by the children who took part will likely have impacted on their social learning experiences, with more time spent in the home environment and decreased social networks.

The pandemic itself significantly affected participant recruitment and data collection. Over a period of eight months, only three sets of participants were recruited, which meant that the stages of data collection, transcription and analysis were considerably compressed, reducing the opportunity for rapport building prior to data collection. Due to ongoing concerns around Covid-19 transmission, all data was collected remotely, which meant that the schools and supporting adults were integral to the data collection process. However, this means that there was variance in how data was collected, due to the necessary involvement of multiple people. These remote data collection sessions did not allow for the mosaic to be expanded by using observation of the children at play, for example, which would have further enriched the dataset.

This research cannot be separated from the extraordinary circumstances which provide its context, as to have lived through this time in history, as with all others, will dictate the lens which we use to view and make sense of the world. In addition to this, having lived and worked through the pandemic, this will have influenced how the researcher interpreted the data.

5.7 Conclusion

This research explored how three autistic children make sense of gender. The findings provide insight into what factors help and hinder sense making, the impact of play and the experiences of key adults. The analysis employed RTA, with themes relating to the child's view of the world, the role of play and interests, how clothes can help make sense of people, the role of immediate environments and gendered messages in the wider world identified. Findings were set out in the context of Ecological systems theory, social cognition and social motivation theories, to understand if there is anything different about how autistic children make sense of gender.

This research makes a unique contribution to research about the experiences of autistic children and young people about their understanding of gender, in the context of increased co-occurrence of autism and gender variance in a non-problematising way. Suggestions for further research have been provided, along with implications for Educational Psychologists.

Each child who took part in this research was able to share their interpretations of the gendered world, which they based on their own experiences of different ecosystems. Familiar adults supported this understanding with their own interpretations, which the researcher triangulated and co-constructed meaning through analysis.

The increased prevalence of gender variance in the autistic population and associated disadvantages of inhabiting both neurodiverse and gender diverse identities provided the rationale for this research. Although the underlying theory suggests that autistic children might be less susceptible to social

messaging about gender expression and gender roles and may make sense of these differently than their neurotypical peers, this research highlights many similarities. This sample of KS2 pupils receive social messages from many different ecosystems; their family, peers, school and media. In addition to this, much like their neurotypical peers, their play and play behaviours appear to have socially learned and motivated elements. Inflexible thinking can impede sense making around gender in some circumstances, but at other times, children were able to generalise their previous learning to mitigate this.

This research is of great importance, given the increased vulnerability for people having both trans+ and neurodiverse identities, set in the current context of the Neurodiversity movement, controversies within clinical support for trans+ youth and the continuing failure to protect trans+ people by the UK government. The research set out to find out if there is anything different about the way autistic children in KS2 make sense of gender and found many similarities. There is much to gain in supporting the autistic and trans+ communities in identifying if there are differences at a later stage of development, and I hope to be able to follow this research up with autistic teens.

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<https://www.unicef.org.uk/what-we-do/un-convention-child-rights/>

- Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing & Health Sciences*, 15(3), 398–405. <https://doi.org/10.1111/nhs.12048>
- Wainwright, B. R., Allen, M. L., & Cain, K. (2020). Symbolic Understanding and Word–Picture–Referent Mapping from iPads in Autism Spectrum Condition: The Roles of Iconicity and Engagement. *Journal of Autism and Developmental Disorders*, 50(8), 2941–2956. <https://doi.org/10.1007/s10803-020-04404-8>
- Wallace, F., & Giles, P. (2019). Participatory Research Approaches in Educational Psychology Training and Practice. *Educational Psychology Research and Practice*, 5(1), 9.
<https://repository.uel.ac.uk/download/232cd96326fb368768449a523acc241023f0f1a6e1deeba8b4c549fc96940640/444681/Educational%20Psychology%20Research%20and%20Practice%202019%205%201%20Wallace%20and%20Giles.pdf>
- Willig, C. (2013). *Introducing Qualitative Research in Psychology*. McGraw-Hill Education.
<http://ebookcentral.proquest.com/lib/uel/detail.action?docID=1220260>

Appendices

Appendix A

Full References of Studies Excluded from the Systematic Review

Reference	Reason
Cheslack-Postava, K., & Jordan-Young, R. M. (2012). Autism spectrum disorders: Toward a gendered embodiment model. <i>Social Science & Medicine</i> , 74(11), 1667–1674. https://doi.org/10.1016/j.socscimed.2011.06.013	Type of research: Not empirical qualitative research or a meta-analysis
Cooper, K., Smith, L. G. E., & Russell, A. J. (2018). Gender Identity in Autism: Sex Differences in Social Affiliation with Gender Groups. <i>Journal of Autism & Developmental Disorders</i> , 48(12), 3995–4006.	Type of research: quantitative
Cresswell, L., & Cage, E. (2019). ‘Who am I?’: An exploratory study of the relationships between identity, acculturation and mental health in autistic adolescents. <i>Journal of Autism and Developmental Disorders</i> , 49(7), 2901–2912. https://doi.org/10.1007/s10803-019-04016-x	Type of research: quantitative
Dewinter, J., De Graaf, H., & Begeer, S. (2017). Sexual Orientation, Gender Identity, and Romantic Relationships in Adolescents and Adults with Autism Spectrum Disorder. <i>Journal of Autism & Developmental Disorders</i> , 47(9), 2927–2934.	Phenomena of interest: Does not talk about identity development
George, R., & Stokes, M. A. (2018). Gender identity and sexual orientation in autism spectrum disorder. <i>Autism: The International Journal of Research & Practice</i> , 22(8), 970–982.	Type of research: Mixed methodology
Hillier, A., Gallop, N., Mendes, E., Tellez, D., Buckingham, A., Nizami, A., & OToole, D. (2019). Lgbtq + and autism spectrum disorder: Experiences and challenges. <i>International Journal of Transgenderism</i> . https://doi.org/10.1080/15532739.2019.1594484	Phenomena of interest: Does not talk about identity development
Hines, M. (2020). Human gender development. <i>Neuroscience & Biobehavioral Reviews</i> , 118, 89–96.	Type of research: Not empirical qualitative research or a meta-analysis

Hodge, N., Rice, E. J., & Reidy, L. (2019). 'They're told all the time they're different': How educators understand development of sense of self for autistic pupils. <i>Disability & Society</i> , 34(9–10), 1353–1378. https://doi.org/10.1080/09687599.2019.1594700	Sample: Not neurodiverse participants
Jack, J. (2012). Gender Copia: Feminist Rhetorical Perspectives on an Autistic Concept of Sex/Gender. <i>Women's Studies in Communication</i> , 35(1), 1–17. a9h.	Type of research: Not empirical qualitative research or a meta-analysis
Jackson-Perry, D. (2020). The Autistic Art of Failure? Unknowing Imperfect Systems of Sexuality and Gender. <i>Scandinavian Journal of Disability Research</i> , 22(1), 221–229.	Type of research: Not empirical qualitative research or a meta-analysis
Jacobs, L. A., Rachlin, K., Erickson-Schroth, L., & Janssen, A. (2014). Gender dysphoria and co-occurring autism spectrum disorders: Review, case examples, and treatment considerations. <i>LGBT Health</i> , 1(4), 277–282. https://doi.org/10.1089/lgbt.2013.0045	Phenomena of interest: Does not talk about identity development
Kuvalanka, K. A., Mahan, D. J., McGuire, J. K., & Hoffman, T. K. (2018). Perspectives of mothers of transgender and gender-nonconforming children with autism spectrum disorder. <i>Journal of Homosexuality</i> , 65(9), 1167–1189. https://doi.org/10.1080/00918369.2017.1406221	Sample: Not autistic participants
Ortega, F., & Choudhury, S. (2011). 'Wired up differently': Autism, adolescence and the politics of neurological identities. <i>Subjectivity</i> , 4(3), 323–345. https://doi.org/10.1057/sub.2011.9	Type of research: Not empirical qualitative research or a meta-analysis
Ringer, N. (2020). Living with ADHD: A meta-synthesis review of qualitative research on children's experiences and understanding of their ADHD. <i>International Journal of Disability, Development and Education</i> , 67(2), 208–224. https://doi.org/10.1080/1034912X.2019.1596226	Phenomena of interest: Does not talk about identity development
Van der Laan, Doug P., Postema, L., Wood, H., Singh, D., Fantus, S., Hyun, J., Leef, J., Bradley, Susan, J., & Zucker, Kenneth, J. (2015). Do Children with Gender Dysphoria Have Intense/Obsessional Interests? <i>Journal of Sex Research</i> , 52(2), 213–219.	Sample: Not Neurodiverse participants

Walsh, R. J., Krabbendam, L., Dewinter, J., & Begeer, S. (2018). Brief Report: Gender Identity Differences in Autistic Adults: Associations with Perceptual and Socio-cognitive Profiles. <i>Journal of Autism & Developmental Disorders</i> , 48(12), 4070–4078.	Phenomena of interest: Does not talk about identity development
Wright, H. (2018). 'Emotional turbulence': The development of symbolic thinking in the psychotherapeutic treatment of an adolescent girl. <i>Journal of Child Psychotherapy</i> , 44(1), 55–72.	Sample: Not Neurodiverse participants
van Schalkwyk, G. I., Klingensmith, K., & Volkmar, F. R. (2015). Gender Identity and Autism Spectrum Disorders. <i>The Yale Journal of Biology and Medicine</i> , 88(1), 81–83.	Type of research: Not empirical qualitative research or a meta-analysis

Appendix B

Full References for Studies Included in Systematic Literature Review

Full references of studies included in systematic review

Cain, L. K., & Velasco, J. C. (2021). Stranded at the intersection of gender, sexuality, and autism: Gray's story. *Disability & Society*, 36(3), 358–375.

Cridland, E. K., Caputi, P., Jones, S. C., & Magee, C. A. (2015). The perceptions and experiences of adolescent boys with autism spectrum disorder: A personal construct psychology perspective. *Journal of Intellectual and Developmental Disability*, 40(4), 354–367.

<https://doi.org/10.3109/13668250.2015.1070814>

DePape, A.-M., & Lindsay, S. (2016). Lived Experiences from the Perspective of Individuals with Autism Spectrum Disorder: A Qualitative Meta-Synthesis. *Focus on Autism and Other Developmental Disabilities*, 31(1), 60–71.

<https://doi.org/10.1177/1088357615587504>

Kanfiszer, L., Davies, F., & Collins, S. (2017). 'I was just so different': The experiences of women diagnosed with an autism spectrum disorder in adulthood in relation to gender and social relationships. *Autism: The International Journal of Research & Practice*, 21(6), 661–669.

Schott, E.M.P. (2012). *ADHD Identity: A Conceptual Developmental Model* [Doctoral Thesis, University of Southern California]. USC Libraries.

<http://digitallibrary.usc.edu/digital/collection/p15799coll3/id/4078>

Stenner, P., O'Dell, L., & Davies, A. (2019). Adult women and ADHD: On the temporal dimensions of ADHD identities. *Journal for the Theory of Social Behaviour*, 49(2), 179–197. <https://doi.org/10.1111/jtsb.12198>

Strang, J. F., Powers, M. D., Knauss, M., Sibarium, E., Leibowitz, S. F., Kenworthy, L., Sadikova, E., Wyss, S., Willing, L., Caplan, R., Pervez, N., Nowak, J., Gohari, D., Gomez-Lobo, V., Call, D., & Anthony, L. G. (2018b). "They Thought It Was an Obsession": Trajectories and Perspectives of Autistic Transgender and Gender-Diverse Adolescents. *Journal of Autism & Developmental Disorders*, 48(12), 4039–4055.

Appendix C
Thematic Breakdown of Literature

Paper	Author identified themes	Author identified subthemes
Cain & Velasco, (2021)	Identity	Gender identity Sexuality Education
	Disability	Mental health Health conditions ASD
	Transitions	Medical transitions
Cridland et al., (2015)	Increasing complexity of the adolescent social realm	Developing and maintaining friendships Interacting with girls Experiences of bullying Limited social opportunities with peers
	Sense making in complex social situations	Processing and functioning within multifaceted situations Ability to focus Unique perception of the world
	Identity Development	Self-description Impact of ASD on identity
	Developing flexible processing styles	Challenges of puberty Understanding and managing physical changes

		Understanding and managing emotions
DePape & Lindsay, (2016)	Perception of self (26 studies)	Identity Interests/talents Stress/coping
	Interaction with others (29 studies)	Family Friends Experts
	Experiences of school (17 studies)	Curriculum Challenging situations
	Factors related to employment (12 studies)	Benefits Drawbacks
Kanfischer et al., (2017)	Gender Identity	I was just so different I think there's some sort of gender identity thing I never had any mothering instincts
	Social relationships	When I try, the conversation just goes dead People didn't want to know me
Schott, (2012)	Diagnosis and symptoms	ADHD mindfulness Childhood vs adulthood circumstance Cognitive level comprehension ADHD upshot
	ADHD identity development	Pivot experience Positive creative spin ADHD emotions ADHD identity amalgamation

	Disability identity development	The (Non)-disabled self Defining disability The Disability Identity Development model ID
	ADHD affects	Coping issues Social, behavioural and academic issues Psychological and cognitive issues
	Treatment, interventions and accommodations	Treatment/interventions type Treatment/interventions impact Accommodations type Accommodations impact
	ADHD relationships	Reaction response Incongruence of perception response Friend mirror factor The ADHD heart
	Education, career and extra-curricular activities	Primary education easy effect Career (aspirations) effect Extracurricular activities affect
	Demographic identification	Unveil vs. unmask Racial/Ethnic/Cultural identification influence Sexual Identity identification influence
Stenner et al., (2019)	Key moment of realisation	ADHD identity as a product of an emergent event: a lightbulb moment Transformation of the meaning of the object called ADHD Transformation of the subject: ADHD as pivotal to a new identity with a newly irrevocable past

		<p>The deeply troubled nature of the old identity:</p> <p>The passion of self-consciousness</p> <p>Giving oneself some slack by letting oneself off the hook</p> <p>With the benefit of hindsight: Lay psychological theories of self-formation</p>
Strang et al., (2018)	Urgent gender needs	<p>I need to live as my affirmed gender</p> <p>I feel gender dysphoria strongly</p> <p>Medical gender supports are important</p>
	Impact of neurodiversity	<p>Being neurodiverse and gender diverse has certain challenges</p> <p>Autism in itself can be difficult</p>
	Gender exploration and expansiveness	<p>I've figured out my gender over time</p> <p>My gender expression doesn't have to be extreme or follow gender stereotypes</p>
	Bias and harassment	<p>I'm less comfortable expressing my gender because I worry about bias and harassment</p> <p>My gender identity has been questioned due to my autism diagnosis</p>
	Confidence in the future	<p>My future will be pretty normal</p> <p>I'm sure my gender will stay the same</p>

Appendix D

Thematic Matrix

Theme	Paper						
	Neurodiverse Identity				Gender Diverse Identity		
	Cridland et al.	DePape & Lindsay	Schott	Stenner et al.	Cain & Velasco	Kanfischer et al.	Strang et al.
Self-concept	Self-description Impact of ASD on identity Challenges of puberty Understanding and managing physical changes Understanding and managing emotions	Identity Interests/talents	Pivot experience Positive creative spin ADHD emotions ADHD identity amalgamation The (Non) – disabled self Defining disability The Disability Identity Development model ID Treatment/interventions type	ADHD identity as a product of an emergent event: a lightbulb moment Transformation of the meaning of the object called ADHD Transformation of the subject: ADHD as pivotal to a new identity with a newly irrevocable past	Gender identity Sexuality Medical transitions	I think there's some sort of gender identity thing	I've figured out my gender over time My gender expression doesn't have to be extreme or follow gender stereotypes I'm sure my gender will stay the same I need to live as my affirmed gender I feel gender dysphoria strongly

			<p>Treatment/interventions impact</p> <p>Accommodations type</p> <p>Accommodations impact</p> <p>Extracurricular activities affect</p> <p>ADHD mindfulness</p> <p>Childhood vs adulthood circumstance</p> <p>ADHD upshot</p>	<p>The deeply troubled nature of the old identity:</p> <p>The passion of self-consciousness</p> <p>Giving oneself some slack by letting oneself off the hook</p> <p>With the benefit of hindsight: Lay psychological theories of self-formation</p>			Medical gender supports are important
Relational factors	<p>Developing and maintaining friendships</p> <p>Interacting with girls</p> <p>Experiences of bullying</p>	Family Friends Experts	<p>Reaction response</p> <p>Incongruence of perception response</p> <p>Friend mirror factor</p> <p>The ADHD heart</p>			<p>When I try, the conversation just goes dead People didn't want to know me</p> <p>I never had any mothering instincts (gender roles)</p>	<p>I'm less comfortable expressing my gender because I worry about bias and harassment</p>

	Limited social opportunities with peers					I was just so different	
Cognitive & affective factors	Processing and functioning within multifaceted situations Ability to focus Unique perception of the world	Stress/coping	Coping issues Social, behavioural and academic issues Psychological and cognitive issues Cognitive level comprehension		Mental health Health conditions ASD		Autism in itself can be difficult
Education & aspirations		Curriculum Challenging situations Benefits Drawbacks	Primary education easy effect Career (aspirations) effect		Education		My future will be pretty normal
Intersectionality			Unveil vs. unmask				Being neurodiverse and gender diverse has

			Racial/Ethnic/Cultural identification influence				certain challenges
			Sexual Identity identification influence				My gender identity has been questioned due to my autism diagnosis

Appendix E

Lived Experiences of Developing a Neurodiverse Identity

Paper	Participants	Research question / Aim	Theoretical framework	Data collection and analysis	Relevant findings & themes
Cridland et al., (2015) USA	n=26 participants from 8 families, comprising: n=7 adolescent males with ASD (mean age 13.7), n=4 adolescent siblings, n=7 fathers and n=8 mothers. Ethnicity unknown	To understand the perceptions and experiences of adolescents with ASD from a personal construct theory perspective	Personal construct theory (Kelly, 1955, 2003)	SSIs (audio recorded) Thematic analysis	It was hypothesized that adolescents with ASD may experience a poorly developed sense of identity and that adolescents with ASD will have difficulty developing a sense of identity. This paper substantiated and contradicted this: most participants were able to provide self-descriptions, but some were basic or described hobbies rather than their identity. Themes: Increasing complexity of the adolescent social realm, Sense making in complex social situations, Identity Development, Developing flexible processing styles
DePape & Lindsay, (2016)	n=318 from 33 studies carried out in USA, UK, Canada, Australia, Switzerland,	Q1: What are the experiences of individuals with ASD across major	N/A	Meta-synthesis of 33 qualitative papers published between 1984-2015.	Some individuals with ASD did not want to understand the implications of their disorder, others struggled with it, especially in adolescence. Many adults accepted ASD. Mixed responses related to identity formation in relation to ASD

	<p>Sweden and Brazil.</p> <p>Participants aged 7-62y of unknown ethnicities</p> <p>studies on adults n=15, adolescents n=10, children n=4, multi-development stages n=2 Unknown n=2</p> <p>77% male 23% female</p>	<p>areas of life, including successes and challenges? Q2: How are these experiences affected by their developmental stage, such as childhood, adolescence and adulthood? Q3: How are these life experiences affected by their developmental stage, such as childhood, adolescence, adulthood?</p>		<p>Thematic synthesis following 3 stage narrative analysis</p>	<p>are consistent with research about other disability groups. Also consistent with parent reports of grieving after a diagnosis which for some ended in acceptance. Repetitive and restricted interests shaped identities and in adults in the workplace these were identified as supporting success. These special interests should be considered in terms of career planning. Children and adolescents' lived experiences are underrepresented in the research.</p> <p>Themes: Perception of self (26 studies) Interaction with others (29 studies) Experiences of school (17 studies) Factors related to employment (12 studies)</p>
Schott, (2012)	n=31 adults aged 18-60+	a) how do adults with ADHD come	Draws on a range of identity	SSIs carried out 1:1 with researcher,	Insights were linked to participant's levels of cognition. Most participants identified as non-disabled.

USA	<p>Ethnicity: European-American 18 Latino/Hispanic-American 7 Asian-American 3 African-American 2 Mixed 1</p> <p>Gender: Women n=17 Men n=13 Trans+ n=1</p> <p>Diagnosis: ADHD</p> <p>All participants had college education</p>	to understand their identity development; b) how does other dimensions of identity, such as gender, race / ethnicity / culture, or sexual identity intersect with ADHD identity development; and c) how does this process inform the embracement or rejection of an ADHD identity?	development models: Erikson (1959, 1982); Chickering and Reisser (1993) and Gibson (2005). It proposes a conceptual developmental model	<p>following 26 point interview schedule. (Digitally recorded)</p> <p>Phenomenological analysis</p>	<p>Themes: Diagnosis and symptoms ADHD identity development Disability identity development ADHD affects Treatment, interventions and accommodations ADHD relationships Education, career and extra-curricular activities Demographic identification</p>
<p>Stenner et al., (2019)</p> <p>UK</p>	n=16 adult women, ages unknown.	How ADHD features in the construction of women's identities and	Psychosocial process thinking G.H. Mead	SSIs, audio recorded and transcribed.	Findings were selectively reported in order to fit with Mead's theories. Many women come to a new understanding of themselves as their children receive a diagnosis. This leads to them being able

	<p>Ethnicity unknown</p> <p>ADHD diagnosis or self-diagnosed</p>	temporal dynamics of identity change		<p>Initial thematic analysis followed by thematic decomposition</p>	<p>to reconstruct their problematic pasts and what they thought were negative aspects of themselves to forms of difference that are misunderstood.</p> <p>Themes: Key moments of realisation</p>
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Appendix F

Lived Experiences of being Neurodiverse and Developing a Gender Diverse Identity

Paper	Participants	Research question / aim	Theoretical framework	Data collection and analysis	Relevant findings and themes
Cain & Velasco, (2021)	n=1 non-binary individual (Assigned female at birth). Age and ethnicity unknown Education level: community college	To explore the complicated intersection of gender identity, sexuality and disability from one individual's perspective	Intersectionality theory (Crenshaw, 1994)	5 x 1-2 hour SSIs following an interview protocol. Life story narrative analysis	Stakeholders should be more welcoming to those with NBIs and support those who do not identify within gender binary. Themes: Identity Disability Transitions
Kanfischer et al., (2017)	n=7 adult women, aged 20-59, with clinical diagnosis of ASD.	Aimed to hear the voices of women diagnosed in adulthood to understand what it means	N/A	SSI following life plan structure (audio recorded and transcribed)	Participants were united in their difficulties with social relationships and how others treated them. Odd behaviour and unusual interests contributed to feelings of people not wanting to be around them. Their difficulties with gender are linked around gender roles and reconciling their non-conformity.

	<p>'Minimal ethnic diversity'</p> <p>3 women had learning difficulties and were detained under the mental health act</p>	and how it feels regardless of their cognitive functioning.		Multi-stage narrative analysis	<p>Findings link with existing literature about adult women's experience and the DePape paper. They are also broadly in line with the papers about adolescent girls.</p> <p>Themes: gender identity, social relationships</p>
Strang et al., (2018)	<p>Adolescents aged 12.9-20.76, Mean age 16.6</p> <p>Race Asian 2/22 White 18/22 Other 2/22</p> <p>Ethnicity Not Hispanic or Latino 22/22</p> <p>Gender: Women 14 gender-binary female</p>	<p>1. What are these young people's personal priorities?</p> <p>2. How do they experience themselves in terms of gender, autism, and the co-occurrence of gender diversity and autism?</p> <p>3. How are these young</p>	N/A	Use of quantitative measures for participant eligibility screening and SSI conducted at 12/22 months in this longitudinal study. 38 point SSI using historical anchors and visual support	<p>Trans+ & GD young people who have ASD have a similar experience to NT trans+/GD youth but autistic GD/trans+ youth are at risk of being misunderstood due to difficulties with language, social communication and self-advocating. Frequently GD is dismissed because of ASD. Autism related NEURODIVERSE also complicates gender affirmation processes.</p> <p>Themes: Urgent gender needs Impact of neurodiversity Gender exploration and expansiveness Bias and harassment</p>

	(transgender young women), six gender-binary male (transgender young men), and two gender nonbinary	people's experiences and perspectives consistent with reports from gender-diverse youth in general, and are there aspects of experience and/or need that appear specific		Framework analysis	
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Appendix G

Weight of Evidence

To critique the papers identified as salient to this search, the Critical Appraisal Skills Programme (CASP) checklist (2018) was used. This framework poses ten questions under the areas of validity, reliability and applicability which are answered with:

- Yes (which suggests a low likelihood of bias);
- No (which suggests a high likelihood of bias);
- Can't tell (which suggests that not enough information was provided to make a judgement about the likelihood of bias). The author amended this option to also include answers which were partially indicated.

This framework does not employ a scoring strategy, but to compare each paper, papers were scored to give an overall rating of high, medium or low weight of evidence. Answers of 'No' scored 0, 'Can't tell / partial' scored 1 and 'Yes' scored 2 points each. The points were totalled for each paper and scored as a percentage to allow classification as a descriptors.

Table of weight

Paper	Validity score (/ 12)	Reliability score (/ 6)	Applicability score (/ 2)	Total score	Percentage	Rating
Cain & Velsaco	9	4	1	14	70	Medium
Cridland	9	5	2	16	80	Medium
DePape	10	3	4	17	85	High
Kanfiszer	11	6	1	18	90	High
Schott	8	3	1	12	60	Low
Stenner	9	2	0	11	55	Low
Strang	12	6	2	20	100	High

Score range	Descriptor
0-60	Low
61-80	Medium
81-100	High

Appendix H

CASP Forms

Paper: Cain, L. K., & Velasco, J. C. (2021).

Section A: Are the results valid?		
1. Was there a clear statement of the aims of the research?	Y	The paper aims to look at how the participant's different identities have intersected and changed over time.
2. Is a qualitative methodology appropriate?	Y	Relates to the subjective experiences of one autistic person who has identified with differing gender identities and sexualities over time.
3. Was the research design appropriate to the address the aims of the research?	Y	Critical interpretivist ontology- reality and truth are unknowable. Life story Narrative methodology justified: to address power imbalances and co-construct the narrative. To provide a rich narrative of the participant's life, holistically making sense of it.
4. Was the recruitment strategy appropriate to the aims of the research?	N	The participant was friends with the 1st researcher and asked to take part. Ethical considerations section does not discuss this closeness or consider appropriateness, although it is possible the participant was more open given their relationship. Participant provided suitable knowledge for study.
5. Was the data collected in a way that addressed the research issue?	Y	Semi-structured interviews (SSI) , using an interview protocol (Not included). 5 x 1-2hrs online video platform. SSI used so the participant can take the discussion in any direction they choose. Researchers chose to ask about the participant's full life story. Recording, transcription and analysis are not discussed. No mention of saturation of data.
6. Has the relationship between researcher and participants been adequately considered?	N	Existing relationship with researcher and the one developed allows for a rich and in depth representation intersectionality. No evidence of critical reflection. Researchers "restructured and moved on" but no detail!
Section B: What are the results?		
7. Have ethical issues been taken into consideration	Y	Ethics granted from institution. Discusses consent from participant but not in detail. No discussion about aftercare. Discusses rigorous member checking throughout the process but again not in detail.

8. Was the data analysis sufficiently rigorous?	Can't tell	Narrative analysis: No critical reflection evident. No demonstration of how data was coded and brought into themes.
9. Is there a clear statement of findings?	Y	Three themes are reported and their subthemes. Reported in order of salience. R's triangulated and member checked with participant and used a reflexive journal. Themes introduced, some illustrated with quotes.
<hr/> Section C: Will the results help locally? <hr/>		
10. How valuable is the research?		Argue this research can inform the way researchers look at GI and intersectionality with other identities. They are clear this may not apply to all intersecting identities.

Paper: Cridland et al., (2015)

<hr/> Section A: Are the results valid? <hr/>		
1. Was there a clear statement of the aims of the research?	Y	Aims to understand perceptions and experiences of teens with ASC and their families BECAUSE this population are vulnerable to mental health issues with the transition to secondary school. Follows up on author's previous research in which they suggested further empirical research.
2. Is a qualitative methodology appropriate?	Y	Seeks lived experiences
3. Was the research design appropriate to the address the aims of the research?	Y	Semi structured interviews and thematic analysis are appropriate and decisions as to why used are explained.
4. Was the recruitment strategy appropriate to the aims of the research?	Y	Recruitment not clear. However selection of participants is clearly outlined, and the rationale is clear.
5. Was the data collected in a way that addressed the research issue?	Y	Interview guide developed based on earlier research and tested on a pilot- minor changes made. Semi structured for flexibility. Data collected in a private space in family home at convenient time for participants. Audio recorded for transcription.

6. Has the relationship between researcher and participants been adequately considered?	N	No critical reflection evident
Section B: What are the results?		
7. Have ethical issues been taken into consideration	Y	Ethical approval demonstrated. Researchers met with participants to explain research prior to obtaining consent. Consent from participant and their parents.
8. Was the data analysis sufficiently rigorous?	Can't tell	-
9. Is there a clear statement of findings?	Y	Themes are clearly stated and illustrated with quotes. It is made clear which themes transferred from earlier research and which one are new from this research. checking discussed above.
Section C: Will the results help locally?		
10. How valuable is the research?		Extensive recommendations made for clinicians and teachers as a result of the findings and recommendations for further research.

Paper: De Pape and Lindsay, (2016)

Section A: Are the results valid?		
1. Did the review address a clearly focused question?	Y	Aim of paper is to synthesise existing qualitative research about lived experience of ASD. Literature review questions are clearly set out. Relevance and importance of the synthesis is clearly outlined in introduction, along with gap in literature of first person accounts.
2. Did the authors look for the right type of papers?	Y	Searched for papers published 1980-2014. Search terms include qualitative research that will be synthesised
3. Do you think all the important, relevant studies were included?	Y	CINAHL, MEDLINE (OVID), Healthstar, PubMed, EMBASE, Web of Science, PsychInfo, social science citation index, Scopus databased were searched, along with use of Google Scholar.

		Citation search of included articles also took place. 2nd Researcher and research assistant both completed review and looked at discrepancies using inclusion/exclusion criteria. No evidence of non-English studies
4. Did the review's authors do enough to assess quality of the included studies?	Y	CASP was used to appraise papers. Both authors independently appraised each article, and notes were verified. No papers were excluded based on methodological problems.
5. If the results of the review have been combined, was it reasonable to do so?	Y	Tabulation of summary of studies, including participants, methods, analysis, main findings and themes. Paper participants could be of any age. Analysis types varied- mostly thematic, some narrative, phenomenological and categorical. 4 overarching themes identified from 33 papers
<hr/> Section B: What are the results? <hr/>		
6. What are the overall results of the review?		4 themes were reported, including quotes to illustrate. They were generated by a three stage narrative synthesis, following the guidelines. Themes are reported in terms of prevalence and summarised concisely in the discussion, along with how these fit with other findings
7. How precise are the results?		Precision is not entirely clear as examples of analysis are not included. It appears only 1 author read all the papers and synthesised the results, where 2 undertook the lit search and quality assessment. This is not as rigorous as including 2 people and discussing differing opinions.
<hr/> Section C: Will the results help locally? <hr/>		
8. Can the results be applied to the local population?	Y	Participants in studies were from different Western countries, including England.
9. Were all important outcomes considered?	Can't tell	It is not clear what the original themes from studies were and how

		the 4 overarching themes were generated.
10. Are the benefits worth the harms and costs?	Can't tell	None noted

Paper: Kanfischer et al., (2017)

Section A: Are the results valid?		
1. Was there a clear statement of the aims of the research?	Y	Aim clear, set within the context of current research and gap in literature.
2. Is a qualitative methodology appropriate?	Y	-
3. Was the research design appropriate to the address the aims of the research?	Y	Use of narrative analysis in order to amplify the voices of a voiceless population. Semi-structured interviews (broad, open-ended) to explore 4 areas with a life-plan structure
4. Was the recruitment strategy appropriate to the aims of the research?	Y	Sought SLT advice to design participant info and consent sheets. Recruitment via targeted community/ in patient health services and voluntary organisations
5. Was the data collected in a way that addressed the research issue?	Y	SSI were audio recorded for transcription by primary researcher. reflections gathered during and after interviews. Interviews completed in home/inpatient unit or NHS setting, as chosen by participants. Questions asked about times e.g. childhood broadly. Prompts provided, where required and participants could bring photos/scrapbooks etc.
6. Has the relationship between researcher and participants been adequately considered?	N	No evidence of critical reflection
Section B: What are the results?		
7. Have ethical issues been taken into consideration	Y	Ethical approval. Consent discussed in terms of mental capacity act, supported by accessible info sheets. Risk management within confidentiality

		and anonymity in terms of GP link (if necessary). Transcriptions anonymised and pseudonymisation.
8. Was the data analysis sufficiently rigorous?	Y	Multi-stage narrative analysis following published frameworks. Coding and theme development discussed, along with story boundaries, content and context, comparing and contrasting
9. Is there a clear statement of findings?	Y	Discusses trustworthiness and validity following frameworks but no mention of inter-coder reliability etc. Themes are introduced, supported by quotes
<hr/> Section C: Will the results help locally? <hr/>		
10. How valuable is the research?		Aligns with and extends existing research related to female experience of ASC but questions our understanding - need to look at individual accounts.

Paper: Schott, (2012)

<hr/> Section A: Are the results valid? <hr/>		
1. Was there a clear statement of the aims of the research?	Y	Research aimed to understand what influences adults with ADHD's identity development. The thesis sets out a lot of theoretical models of identity development and suggests that for people with disabilities, their identity development is more complex, based on an earlier paper.
2. Is a qualitative methodology appropriate?	Y	Qualitative research is appropriate to the research questions. R justifies phenomenological research due to expansiveness and familiarity with data supporting analysis.
3. Was the research design appropriate to the address the aims of the research?	Can't tell	SSI and phenomenological analysis discussed, and reasons explained. No mention of how the questions in the SSI were formulated.
4. Was the recruitment strategy appropriate to the aims of the research?	Can't tell	Participants were recruited from the university via a flier and word of mouth. Clear participant criteria is set out (diagnosis of ADHD and at least 18 years old) but it doesn't set

		out why explicitly. Limited sample is acknowledged for methodological reasons.
5. Was the data collected in a way that addressed the research issue?	Y	SSI - informal conversation interview methodology, 1:1 with the R and P. 26 questions in interview. Interviews were between 30-60mins long, digitally recorded. No mention of saturation of data.
6. Has the relationship between researcher and participants been adequately considered?	N	R highlights they do not have ADHD and are a psychotherapist which could cause bias. No other evidence of critical reflection.
<hr/> Section B: What are the results? <hr/>		
7. Have ethical issues been taken into consideration	Can't tell	Participant info and debrief is explicit. Confidentiality and anonymity is mentioned. Does not explicitly mention ethical approval.
8. Was the data analysis sufficiently rigorous?	Can't tell	Interviews transcribed by R or 3p and reviewed by R. 7 step analysis was followed (Moustakas 1994). Software used to code data. Peer reviewer involved to discuss and validate themes over 3 hours.
9. Is there a clear statement of findings?	Can't tell	Discussion of themes with 3p is mentioned. member checking did not occur. 28 Themes are set out clearly and there are quotes to add context. There is a concise summary at the end of the chapter. It highlights factors that impact on identity development. Findings are reported in terms of groups of Ps
<hr/> Section C: Will the results help locally? <hr/>		
10. How valuable is the research?		Implications for practice are set out, applicable to people with ADHD, teachers, and medical professionals and offers ideas about what can be done to support people with ADHD. Further research is suggested. Generalising findings to others with ADHD is not advised.

Paper: Stenner et al., (2017)

Section A: Are the results valid?

1. Was there a clear statement of the aims of the research?	Y	Clear aims, set within context of current literature. Rationale for gaining women's perspective is set against prevalence rates of adult diagnosis and research mostly focussed on male children.
2. Is a qualitative methodology appropriate?	Y	Looking for lived experiences and a temporal understanding so SSI with an opportunity to talk about what they think is relevant is key.
3. Was the research design appropriate to the address the aims of the research?	Y	SSI, with thematic decomposition was justified.
4. Was the recruitment strategy appropriate to the aims of the research?	Can't tell	Strategic sample, recruited through two local community support groups. Women with formal diagnosis OR self-diagnosed.
5. Was the data collected in a way that addressed the research issue?	Y	Interview guide used, based on previous research. Interviews face to face in community centres or by phone. Audio recording and transcription discussed. Anonymisation
6. Has the relationship between researcher and participants been adequately considered?	N	No reflection
<hr/> Section B: What are the results?		
7. Have ethical issues been taken into consideration	Can't tell	Ethical approval discussed. Several participants were detained under the mental health act and had comorbid mental health concerns, but this is not addressed.
8. Was the data analysis sufficiently rigorous?	Y	-
9. Is there a clear statement of findings?	Y	Reported only a sub-set of participants as it fits with the theory used, based around an 'emergent event'. Does not show things which are contrary to this. No credibility discussed.
<hr/> Section C: Will the results help locally?		

10. How valuable is the research?	Opportunities to extend research are discussed. This research allows restorying for the participants from deficit to difference. Limited transferability is discussed given the partial and selective sampling and reporting.
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Paper: Strang et al., (2018)

Section A: Are the results valid?		
1. Was there a clear statement of the aims of the research?	Y	Clear aims and 3 research questions. Set within the context of earlier research with different subgroups of the autistic population.
2. Is a qualitative methodology appropriate?	Y	MIXED methods. Large qual part, supported by quant data which adds in temporal aspects and shows weighting of responses, giving a richer picture.
3. Was the research design appropriate to the address the aims of the research?	Y	Longitudinal study to look at trajectories and to look at lived experience via SSI
4. Was the recruitment strategy appropriate to the aims of the research?	Y	Clear inclusion criteria set out, and six measures to assess inclusion criteria met. All justified. Recruitment via gender service. Participant characteristics clearly set out
5. Was the data collected in a way that addressed the research issue?	Y	Use of specific measures is qualified. Timing of interview and monitoring is qualified. 38 point SSI using historical anchors and visual support, examples provided, and full schedule available on request. Asked to repeat. if required.
6. Has the relationship between researcher and participants been adequately considered?	Y	If there was a shift from trans>cis identity over the course of the study, additional interviews were had. Clear roles of each researcher is listed at end.
Section B: What are the results?		
7. Have ethical issues been taken into consideration	Y	Clear mention about informed consent but lacks detail.


		participants were clinically monitored throughout the study. Ethical approval discussed
8. Was the data analysis sufficiently rigorous?	Y	Framework analysis employed. Used within autistic population. Allows research partnerships with key stakeholder self-advocates - collaborators and co-authors of study.
9. Is there a clear statement of findings?	Y	-
Section C: Will the results help locally?		
10. How valuable is the research?		Makes recommendations for ASC informed gender assessment approaches and blended therapeutic techniques. Proposes a template for engaging perspectives of NEURODIVERSE/GD individuals and amplifying voices. Further research ideas are discussed. States is first study to capture experience of GD/NEURODIVERSE ado in their own voice.

Appendix I

Recruitment Poster

Making sense of gender: The perspectives of primary school aged children on the Autism spectrum

Research approved
by UEL School of
Psychology Research
Ethics Committee



Who can participate in this research?

I am looking for parents who have a child:

- With a diagnosis of Autism, ASD or ASC
- **AND** is aged between 7-11 years old.

Who am I and why am I doing this research?

My name is Carla Wasilonek, and I am a Trainee Educational Psychologist studying at UEL.


I would like to understand how Autistic children develop their understanding of gender. This study will explore how Autistic children understand this complex concept and how their parents/carers and teachers support their understanding.

I hope that this research can help to develop a greater understanding of identity development within the Autistic population.


Activities your child will do



Sorting



Crafts



Sharing a favourite toy

What will the research involve?

Your child will complete three short activities in school with a member of staff who knows them well. I will lead the activities virtually using video calling. I will meet with you online to ask you some questions and to share back your child's views with you both. Unfortunately I am not able to provide interpreting services.

I will write my research up as a doctoral thesis. **All participants will remain anonymous.**

Participants will receive a **£10 Amazon voucher** to thank you for your time

If you would like more information or to take part in my research, please contact me on: U1944278@uel.ac.uk

Appendix J
Picture Sorting & Scaling Resources

Clothes



Toys



Appendix K
Sample Gingerbread Person and Clothes



Appendix L
SSI Schedule for School Staff

Semi-structured Interview Questions – Teacher/Support staff

1. Can you tell me a bit about your time as a (insert job title here)?
 - a. How long have you been in this school?
 - b. Can you tell me how the school supports children to develop their identity?
2. How would you describe the child (participant) if you were describing them to a friend or colleague that doesn't know them?
 - a. What does the term 'gender' mean to you?
 - i. Describe researcher's definition of gender
 - b. How is the participant's gender described?
 - c. How do you know?
 - d. Has this changed over time?
3. Tell me about their interests / what they like to play with in school.
 - a. Has this changed over the time you have known them?
4. Tell me about the children they choose to spend time with during school / their friends
 - a. Has this changed over time?
5. Does the participant talk in a gendered way, such as referring to themselves or others as boys or girls, or talking about things for boys or girls?
6. Is there anything else you think I should know to help me understand how the participant makes sense of gender?
7. How did you find being interviewed? What if anything would have improved your experience?

Appendix M

Co-construction Meeting Feedback Slides



1



2



3



4



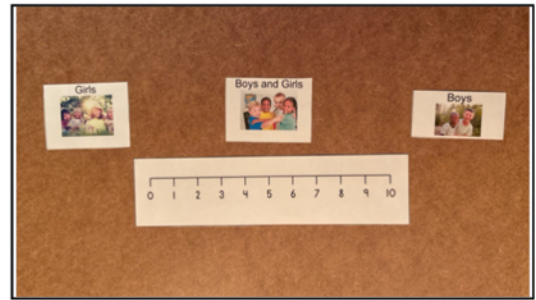
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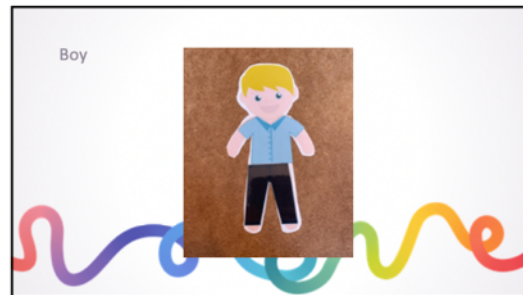
Toy	Rating
Hulk	10
Infinity stones	10
Remote control car	10
LOL doll	0
My Little Pony	0
Sylvanian Families	0.9
Slime	5
Dobby	6
Scooter	5



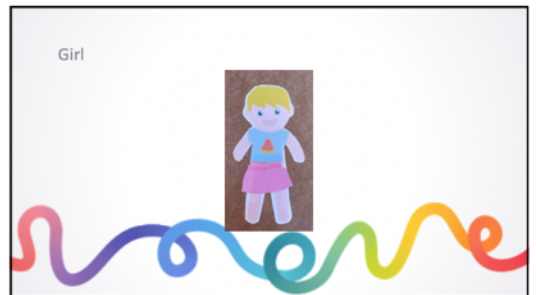
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12



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Appendix N
SSI Schedule for Parent/Carer

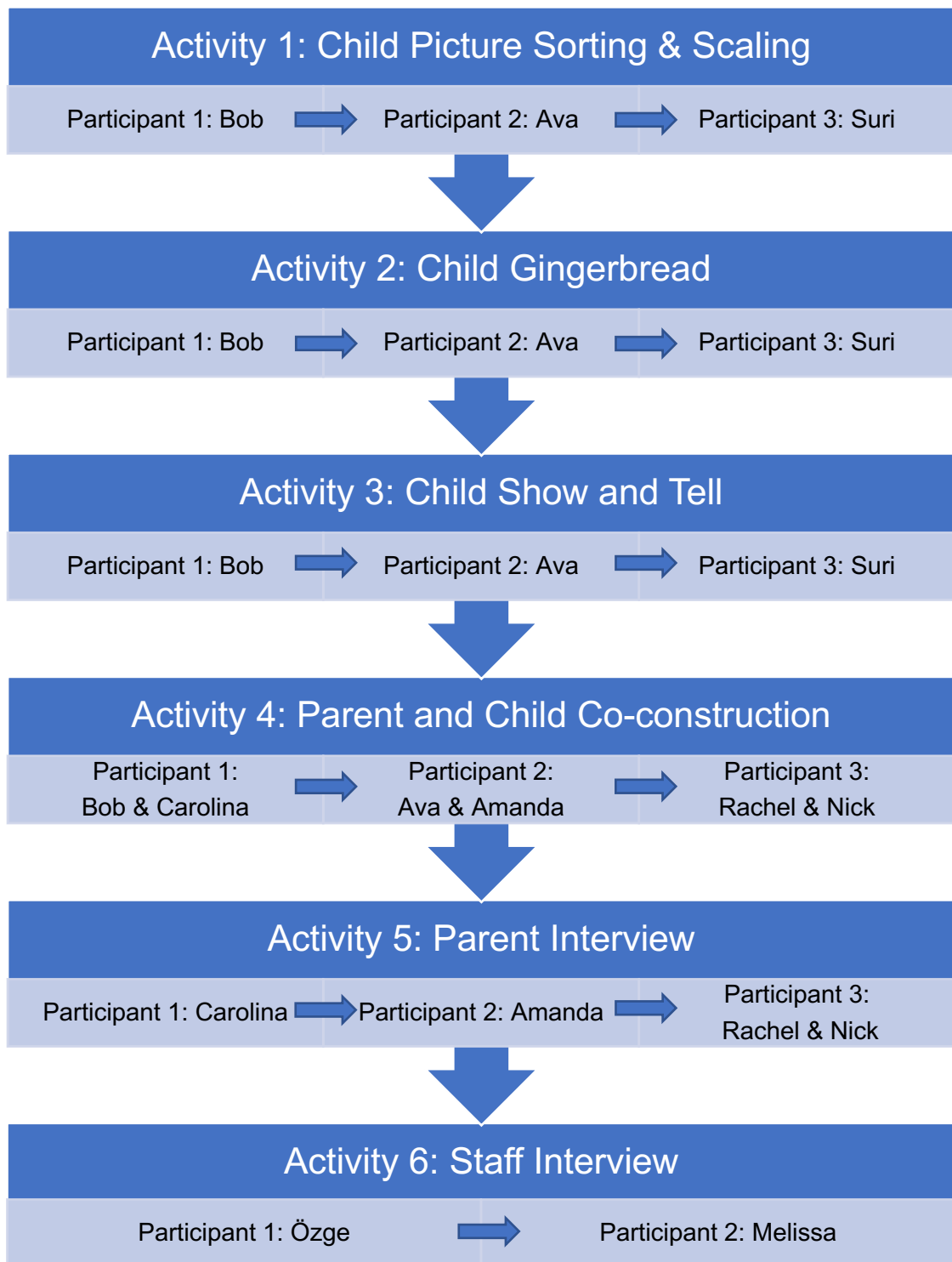
Semi-structured Interview Questions- Parent / Carer

1. Can you tell me a bit about who lives at home with you?
2. I would like to talk to you about gender today. What does the term gender mean to you?
 - a. Describe researcher's definition of gender
3. How do you think children generally learn about gender?
4. What do you want your child to understand about their identity?
 - a. What part does gender play in this?
 - b. How do you help to support them in this.?
5. How would you describe your child (participant) if you were describing them to a friend or colleague who does not know them?
6. How do you describe your child's gender?
 - a. Has this changed over time?
7. What do they like to play with or are their interests?
 - a. Have these changed over time?
8. Tell me about the child(ren) that your child spends time with.
 - a. Has this changed over time?
9. How does your child describe their own gender?
 - a. Has this changed over time?
10. Is there anything else that you think I should know that would help me to understand how your child makes sense of gender?
11. How did you find being interviewed? What if anything would have improved your experience?

Appendix O

Sequence of Transcription and Analysis

Data was transcribed and analysed in the order set out below to prioritise child data.






Appendix P
Research Data Management Plan (RDMP)



Appendix Q


Sample transcript to show coding

		Transcript	Picture	Code
1.	R	So this <u>Next</u> one is going to be sorting out clothes and Miss N you can tell me when you've got everything ready		
2.	P1	Wait aren't we on activity 2?		
3.	R	Well, almost, so activity one has got three parts to it		
4.	P1	Oh OK		
5.	R	but it shouldn't take too long to do all of them I'll be very clear when we're on to activity two		
6.	S	Right so we've got boys and girls people boys and we've got girls yeah?		
7.	P1	OK		
8.	R	So what-		
9.	S	[overlaps] these are the toys now this is round two		
10.	R	Ah toys yes OK		
11.	P1	[overlaps] I think this one is going to be harder		
12.	S	Is that OK miss?		
13.	R	yes that's absolutely fine so Bob (P1) there's no right or wrong answers here		
14.	S	[overlaps] are you listening?		
15.	R	I want you to tell me which toys you think are for boys which toys you think are for girls and if boys and girls can play with the toy so if you think boys <u>and</u> girls can play with it then you'll put it in the boys and girls hoop		



16.	P1	Ok [sorts cards]		
17.	S	hey, Miss, do you want me to tell you what he's putting each group?		
18.	R	yeah that would be great what did you put in the boys group?		
19.	P1	[clears throat] the boys group has a monster truck thingy, the hulk and the infinity stone hand		1.1.3 Boys play with trucks 1.1.4 Boys play with superheroes 1.1.5 Boys play with action figures
20.	R	Ah yeah the big glove with the infinity stones, ok		
21.	S	And the- the hulk as well		
22.	R	And hulk. And what about the girls?		
23.	P1	Princess Unicorn thing		1.1.6 Girls play with princesses 1.1.7 girls play with unicorns/ponies
24.	S	[overlaps] My pony		
25.	P1	my pony, LOL		1.1.8 Girls play with dolls
26.	S	LOL Doll and-		1.1.9 Girls play house/families
27.	P1	And a little -		
28.	S	What are these called these are the families the s-		
29.	P1	Sylvanian families		
30.	R	OK		
31.	S	They're called and then boys and girls-		



32.	P1	[overlaps] boys and girls scooter Harry Potter		1.1.10 Scooters are for boys and girls
33.	S	[overlaps] D- Dobbie figure		1.1.11 Harry Potter/Dobbie is for boys and girls
34.	P1	Dobbie figure and slime		1.1.12 Slime is for boys and girls
35.	R	And slime. Uh excellent, thank you so much for that! Now Miss N would you keep the toys uh the toy cards to one side cos we'll come back to them, and we'll go on to the next round which is the same labels but using the clothes pictures		
36.	S	yes		
37.	R	Thank you		
38.	S	Do you want me to read you the numbers at the back? Sorry I didn't see them earlier		
39.	R	It's alright, don't worry about it , I just did that cos I thought it might have been easier but it's fine		
40.	S	So if you put those in where you think they belong same (?as before?)		
41.	P1	[places cards]		
42.	S	Yeah that's r- there's no right or wrong answer (pause) lovely. Miss shall I read the numbers out on the back because I think it will be easier for this activity		
43.	R	Yeah thank you		
44.	S	Ok so we've got for girls we've got number 7 and number 8		


				1.1.13 Girls wear pink 1.1.14 Girls wear dresses 1.1.15 Girls wear yellow
45.	R	Yeah		
46.	S	Thank you Bob and for the boys we have number 3		1.1.16 Boys wear trousers/joggers/pants 1.1.17 Boys wear grey
47.	R	Yeah		1.1.18 Anybody can wear denim 1.1.19 Anybody can wear jeans 1.1.20 Anybody can wear trousers
48.	S	And for boys and girls we've got a large selection here		
49.	R	OK		
50.	S	We've got 6 5 4		
51.	R	Mm hm		
52.	S	9		
53.	R	yeah		

54.	S	2 and 1		<p>1.1.21 Anybody can wear dungarees</p> <p>1.1.22 Anybody can wear shorts</p> <p>1.1.23 boys and girls can wear stripes</p> <p>1.1.24 Anybody can wear multi-colours/rainbows</p> <p>1.1.25 Anybody can wear superheros</p> <p>1.1.26 Anybody can wear plain tshirts</p> <p>1.1.27 Anybody can wear dinosaurs</p> <p>1.1.28 Anybody can wear short or long sleeves</p> <p>1.1.42 Anybody can wear blue</p>
55.	R	Excellent, thank you so much Bob (P1). That is really brilliant. We've just got <u>one more</u> activity, well one more round in this activity to do		
56.	P1	OK		
57.	R	And then that's using the toy pictures and the labels and the scale so I'm going to change the picture of- that will look like. How does it feel seeing me through the little square on the skween- on the screen? (laughs)		
58.	S	[clears throat] Here you go, that's for you. ok		
59.	R	Ok so do we have girls at 0 and boys at 10 is that the right- the same way round as you have them?		


60.	S	Yes		
61.	P1	[overlaps] yes		
62.	R	Ok so Bob (P1) I have got a scale here and it goes from nought to 10 have you ever used a scale before?		
63.	P1	I think so, I do know what it means		
64.	R	when do you think you used a scale before?		
65.	P1	Erm probably in a maths lesson		
66.	R	Oh yeah a scale or a number line, we'd use those in a maths lesson wouldn't we? sometimes we use a scale to say- you might have done things like if someone said to you-		
67.	P1	Oh I know, I know like scaling from one to 10 how girlish or boyish you think a toy is		1.1.1Toys are for girls/ girlish 1.1.2 /Toys are for boys/boyish
68.	R	That is! well you've just got it I was I was going to say you might have done like marking your day out of 10 on a scale and said 'oh today was a really good day I'm going to give it an 8' but my scale's a bit different so you're right it's to say <u>how much</u> for girls or how much for <u>boys</u> a toy is and there's no right or wrong answer it's just your opinion so if something is for girls <u>and boys</u> the same amount then that would be a number 5 on the scale it would be right in the middle of the scale but if you think is if something is <u>more</u> for girls than you'd put it <u>lower</u> down the scale and if you think it's <u>more</u> for boys than it would be higher up the scale		
69.	P1	OK		


70.	S	Miss would you like to start with the toys?		
71.	R	Erm yes, I'd like to just do it with the scooter, the slime and <i>Dobbie</i>		
72.	S	Scooter slime and <i>Dobbie</i> . Fine so we've got number 6 I believe, number 7 and number 2		
73.	R	Yeah so which one will you do first Bob (p1)		
74.	P1	The <i>slimy</i> , so like number 5		1.1.29 slime is equally for boys and girls
75.	R	Ok so does that mean that you think boys and girls can play with the slime an equal amount?		
76.	P1	Yes		
77.	R	Thank you, which one shall we do next?		
78.	P1	I think that Dobbie is a little bit further to the boy at number 6		1.1.30 Dobbie is a little bit more for boys
79.	R	OK		
80.	P1	And the scooter is at number 5, cause I often see girls with scooters		1.1.31 Scooters are equally for boys and girls

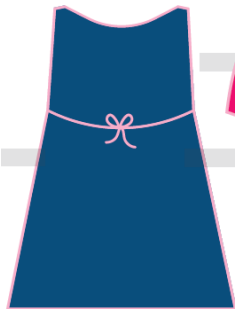

81.	R	[overlaps] OK Mmm		1.1.32 I have one of these
82.	P1	And I have one myself		
83.	R	You do, do you? Ahhh lucky you ok, and now can we do the erm the princess the LOL doll and the <i>Sylvanian</i> ?		
84.	S	Yes		
85.	P1	Yes		
86.	R	Thank you		
87.	S	There you go		
88.	P1	Oh this one's going to be easy. The <i>LOL Doll</i> number 0, <i>My Little Pony</i> doll at number 0 mm the little thingy at maybe 0.9.		<p>1.1.8 Girls play with dolls</p> <p>1.1.7 Girls play with unicorns/ponies</p> <p>1.1.9 Girls play house/families</p> <p>1.1.34 Only girls play with MLP</p> <p>1.1.35 Only girls play with Dolls</p> <p>1.1.36 There's a tiny chance a boy might play with this</p>

89.	S	So a 1 would you say it's kind of closer to a 1 isn't it		
90.	P1	Kind of		
91.	S	What do you think? 0 or 1 you choose		
92.	P1	(inaudible)		
93.	R	I'll take a 0.9! I think that's a good scale number, was that for the <i>Sylvanian families</i> set, 0.9?		
94.	P1	Mmm hmm		
95.	R	OK good job and then we'll look at the monster truck, the <i>Hulk</i> and the <i>infinity stone glove</i>		
96.	S	Here you go		
97.	P1	Now this one is the easiest one out of all of them because they're all for boys		1.1.33 I know right away 1.1.3 Boys play with trucks 1.1.4 Boys play with superheroes 1.1.5 Boys play with action figures
98.	R	Oooh so what number will you give-		.1.37 Only boys can play with trucks 1.1.38 Only boys can play with superheroes 1.1.39 Only boys can play with action figures
99.	P1	10!		
100.	R	10 for all of them?		
101.	P1	Yes		
102.	R	Ok woah I'm so lucky that I've got you helping me today because you're doing a fabulous job at this I'm learning so much about toys and clothes OK right Bob (p1) you will be pleased to hear that that is the end of activity 1 OK? Now are you ok to go onto the next activity right away?		


103.	P1	Ok		
104.	R	I'll show you what the next activity is, so we need <i>different</i> resources for this one and Miss N is going to lay out some clothes and let you choose a little gingerbread person		
105.	S	Which one would you like Bob(p1)?		
106.	P1	Um (?the white one?)		
107.	S	Uh huh, that's no problem, thank you		
108.	R	Who did you choose?		
109.	P1	I guess I chose the white one		
110.	S	With the blonde hair		
111.	R	Ah the blonde hair lovely OK now the object of this activity is really simple-		
112.	P1	[overlaps] Put on the clothes		
113.	R	Yes! So we are going to do it three times, now the first outfit I want you to pick is if your gingerbread person is a boy.		
114.	P1	Ok for a boy?		
115.	R	Mmm hm so you're dressing your gingerbread person as a boy, what clothes do you think he would wear?		
116.	P1	Like pants and shirts and stuff. I'm going to start with the pants so then I don't have to have a- the gingerbread guy wearing underwear [places cards]		1.1.16 Boys wear trousers/joggers/pants 1.1.40 Boys wear shirts
117.	R	(laughs) OK		
118.	P1	(?I need to?) find- ok then he gets- here you go and uh that should be it		
119.	S	Are you done?		
120.	P1	Yeah		
121.	S	Perfect		

122.	R	Fab what numbers clothes is he wearing Miss N?		
123.	S	Uh-		
124.	P1	[overlaps] He's wearing 15, and 1		
125.	R	15 and 1 ooh the dark trousers and the blue shirt		
126.	S	That's right yeah 15 and 1 perfect		
127.	R	Fabulous ok right, now your gingerbread person can take off their clothes again because this time I want you to dress the person up as if they are a girl		
128.	P1	OK right umm [begins placing cards] here you go, I'm using 13 and I'm using – wait, is this possible?		1.1.44 I'm not quite sure how they dress
129.	S	If you want		
130.	P1	OK yeah, number 13 and (pause) 7.		
131.	R	13 and 7, a little pink skirt and a watermelon shirt		

132.	S	that's right		
133.	R	That's a nice outfit. OK right you get to dress your gingerbread person one more time so they can take off that outfit and this time I'd like you to dress this person as if they could be a boy or they could be a girl		
134.	P1	OK		
135.	R	This is clothes that anybody can wear		

136.	P1	OK clothes that anybody can wear. Um number 19 (pause) oh no that's for girls, OK		1.1.14 Girls wear dresses 1.1.41 Boys wear blue 1.1.49 Not boys can't wear dresses
137.	S	This is for anybody, girls and boys yep		1.1.41 Boys wear blue 1.1.50 Anybody can wear purple 1.1.51 Anybody can wear shirts 1.1.18 Anybody can wear denim 1.1.52 Anybody can wear a skirt
138.	P1	[places cards] ok, I've used number 6 and number 2		
139.	R	Number 6 and number 2 okie dokey so that is a purpley shirt and a blue (pause) bottoms (pause)		

		<u>okie dokey. Excellent, well that is activity number 2 (pause) finished</u>		
140.	P1	OK		
141.	R	SO now you can see Bob (p1) that we've just got 1 activity left		
142.	P1	Right		
143.	R	And that's my show and tell (pause). Did you bring something in from home?		
144.	P1	Yes I have		
145.	R	You did? So when I spoke to your mum I said 'I'd like Bob (p1) to bring in something that he's <u>really</u> interested in or he thinks represents him in some way, something that says who he is. What have you chosen to bring?		
146.	P1	(inaudible) [holds up a Mario figurine to the camera]		1.1.5 Boys play with action figures 3.1.9 Boys like computer games
147.	R	It's a-me-a- Mario!		
148.	P1	Yes it is. He's probably my- about my favourite one that when I'm like really really bored and I have absolutely nothing to do I just create my own <i>Mario</i> game		1.1.53 This is my special interest/favourite character 1.1.54 When I am bored I turn to this
149.	R	Oh wow! How do you do that?		
150.	P1	Well mainly I- there's- since I have lots of Mario figures of the same design that's specific, then you like make actual levels so I have the question block accessories using the question blocks and I have the hold ems that's how you make it float		1.1.55 I collect toys 1.1.56 I design my own games

151.	R	Yeah		
152.	P1	And I have a <i>Goomba</i> army of the figures, I have some of the ?tube figures and I even have a little working flag		1.1.55 I collect toys
153.	R	Wow so it goes up the flag pole when he gets to the end of the level?		
154.	P1	Yes		
155.	R	Oh that sounds great fun. So you said <i>Mario</i> is your absolute favourite is he your favourite <u>character</u> or your favourite character in a game?		
156.	P1	No he's my favourite character		1.1.53 This is my special interest/favourite character
157.	R	He's your favourite character full stop, wow and how long have you been into <i>Mario</i> for?		
158.	P1	Erm for about maybe 7 years because when I was a baby I used to be a lot into <i>angry birds</i>		1.1.57 This isn't a fleeting interest
159.	R	Mmm hmm		1.1.58 I've had other special interests
160.	P1	And then I found <i>Mario</i> and then I became into <i>Mario</i> and a little bit of <i>angry birds</i>		1.1.59 I still like my old special interests, but not as much
161.	R	Ah		3.1.9 Boys like computer games
162.	P1	I still have <i>the Angry Birds</i> app like all of the apps you can't get from the app store anymore		
163.	R	Really?		1.1.60 I hold onto games/toys

164.	P1	Yeah you can't get them even from the app store, so I have the <i>angry birds</i> go to (?) land, the <i>angry birds</i> go to space, <i>angry birds</i> (?)		3.1.9 Boys like computer games
165.	R	Wow okie dokey, so yeah you used to be a big fan but now you're much more into Mario, but you still play angry birds a little bit		
166.	P!	Yes		
167.	R	Ok oh well that's excellent, thank you for sharing Mario with me and telling me all about him		
168.	P1	You're welcome		
169.	r	Ok you'll be pleased to hear that that means that our show and tell activity is finished. Oh look, I had a whole screen for it- so we're finished, which means we are done. I will just say before we go, are there any questions that you want to ask me about you taking part in this today?		

Appendix R

Ethical Approval

School of Psychology Research Ethics Committee

NOTICE OF ETHICS REVIEW DECISION

For research involving human participants

BSc/MSc/MA/Professional Doctorates in Clinical, Counselling and Educational Psychology

REVIEWER: Fevronia Christodoulidi

SUPERVISOR: Mary Robinson

STUDENT: Carla Wasilonek

Course: Prof Doc Edu Child Psych

Title of proposed study: Making sense of gender: The perspectives of primary school aged children on the Autism spectrum

DECISION OPTIONS:

1. **APPROVED:** Ethics approval for the above named research study has been granted from the date of approval (see end of this notice) to the date it is submitted for assessment/examination.
2. **APPROVED, BUT MINOR AMENDMENTS ARE REQUIRED BEFORE THE RESEARCH COMMENCES** (see Minor Amendments box below): In this circumstance, re-submission of an ethics application is not required but the student must confirm with their supervisor that all minor amendments have been made before the research commences. Students are to do this by filling in the confirmation box below when all amendments have been attended to and emailing a copy of this decision notice to her/his supervisor for their records. The supervisor will then forward the student's confirmation to the [School](#) for its records.
3. **NOT APPROVED, MAJOR AMENDMENTS AND RE-SUBMISSION REQUIRED** (see Major Amendments box below): In this circumstance, a revised ethics application must be submitted and approved before any research takes place. The revised application will be reviewed by the same reviewer. If in doubt, students should ask their supervisor for support in revising their ethics application.

DECISION ON THE ABOVE-NAMED PROPOSED RESEARCH STUDY

(Please indicate the decision according to one of the 3 options above)

APPROVED

Minor amendments required (for reviewer):

This is not an amendment, it is more a question about the conduct of the research, not an ethical concern as such: given that data collection will include images, not sure how this will be possible if only telephone is used, rather than a recording that requires camera....though I

imagine that priority will be given to using camera to connect on ~~MSTeams~~ and the 'telephone/voice' only option is just a last resort measure.

Major amendments required (for reviewer):

Confirmation of making the above minor amendments (for students):

I have noted and made all the required minor amendments, as stated above, before starting my research and collecting data.

Student's name (*Typed name to act as signature*): Carla Wasilonek
Student number: u1944278

Date: 19/03/21

(Please submit a copy of this decision letter to your supervisor with this box completed, if minor amendments to your ethics application are required)

ASSESSMENT OF RISK TO RESEACHER (for reviewer)

Has an adequate risk assessment been offered in the application form?

YES / NO

Please request resubmission with an adequate risk assessment

If the proposed research could expose the researcher to any of kind of emotional, physical or health and safety hazard? Please rate the degree of risk:

☐ HIGH

Please do not approve a high risk application and refer to the Chair of Ethics. Travel to countries/provinces/areas deemed to be high risk should not be permitted and an application not approved on this basis. If unsure please refer to the Chair of Ethics.

☐ MEDIUM (**Please approve but with appropriate recommendations**)

☐ LOW

Reviewer comments in relation to researcher risk (if any).

Reviewer (Typed name to act as signature):

Dr Fevronia Christodoulidi

Date: 8 March 2021

This reviewer has assessed the ethics application for the named research study on behalf of the School of Psychology Research Ethics Committee

RESEARCHER PLEASE NOTE:

For the researcher and participants involved in the above named study to be covered by UEL's Insurance, prior ethics approval from the School of Psychology (acting on behalf of the UEL Research Ethics Committee), and confirmation from students where minor amendments were required, must be obtained before any research takes place.

For a copy of UELs Personal Accident & Travel Insurance Policy, please see the Ethics Folder in the Psychology Noticeboard

Appendix S
Adult Participant Information, Consent Forms and Debrief Letters



PARTICIPANT DEBRIEF LETTER

Thank you for participating in my research study on how children on the Autism Spectrum make sense of gender. This letter offers information that may be relevant in light of you having now taken part.

What will happen to the information that you have provided?

The following steps will be taken to ensure the confidentiality and integrity of the data you have provided.

- I will securely store your personal contact details in a password protected file on my password protected personal computer. This means that only I will have access to it.
- I will securely store the data recordings in files on my secure university drive. These files are accessible by dual authentication for added security. I will also back-up these files using an external hard drive, which will remain in a locked cabinet inside my home at all times.
- To ensure that all data is anonymous, I will transcribe all the data collected into word documents. These transcripts will use pseudonyms where names or other identifying details are collected. This means you will not be identifiable. I will also back-up these files using an external hard drive, which will remain in a locked cabinet inside my home at all times.
- Your anonymised data will be seen by my supervisor, examiners and excerpts of your data may be published in academic journals. If you opt into your anonymised data being included in the UEL repository, this will be held for a minimum period of five years and will be openly accessible.
- After the study has been completed, and I have finalised the report following examination, I will delete the audio and video recordings and participant

contact details. I will save your anonymised transcripts for a period of three years, after which point they will be destroyed.

What if you want to withdraw?

You are free to withdraw from the research study at any time without explanation, disadvantage or consequence. Separately, you may also request to withdraw your data even after you have participated data, provided that this request is made within 3 weeks of the data being collected (after which point the data analysis will begin, and withdrawal will not be possible).

What if you have been adversely affected by taking part?

It is not anticipated that you or your child will have been adversely affected by taking part in the research, and all reasonable steps have been taken to minimise potential harm. Nevertheless, it is still possible that your participation – or its after-effects – may have been challenging, distressing or uncomfortable in some way. If you have been affected in any of those ways you may find the following resources/services helpful in relation to obtaining information and support:

Service	What support they can offer	Website	Email Address	Telephone Number
Mind	Support for adult mental health and well-being	mind.org.uk	Info@mind.org.uk	Infoline: 0300 123 3393
National Autistic Society	Information for families of and people with Autism	autism.org.uk	Nas@nas.org.uk	Autism Helpline: 0808 800 4104
[LA] Advisory Service for Autism	Support for families with a child who has Autism in [LA]	[LA]asa.org.uk	Admin@[LA]asa.org.uk	Administrator 02xx xxx xxxx
Family Support	Offering support to families	Cp. childrensportal. [LA].gov.uk	Please refer to the website	02xx xxx xxxx

Family Fund	Grants for families with disabled children	Familyfund.org.uk	Contact via form on the website	01904 550 055
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You are also very welcome to contact me or my supervisor if you have specific questions or concerns.

Contact Details

If you would like further information about my research or have any questions or concerns, please do not hesitate to contact me.

Carla Wasilonek,

If you have any questions or concerns about how the research has been conducted please contact the research supervisor Mary Robinson. School of Psychology, University of East London, Water Lane, London E15 4LZ,
Email: m.robinson@uel.ac.uk

or

Chair of the School of Psychology Research Ethics Sub-committee: Dr Tim Lomas, School of Psychology, University of East London, Water Lane, London E15 4LZ.
(Email: t.lomas@uel.ac.uk)



PARTICIPANT INFORMATION SHEET – PARENTS / CARERS

You are being invited to participate in a research study. Before you agree it is important that you understand what your participation would involve. Please take time to read the following information carefully.

Who am I?

I am a postgraduate student in the School of Psychology at the University of East London and am studying for a Professional Doctorate in Educational Psychology. As part of my studies I am conducting the research you are being invited to participate in.

What is the research title?

Making sense of gender: The perspectives of primary school aged children on the Autism spectrum

What are the aims of the study?

Although we know quite a lot about how neurotypical children develop their awareness of gender, we don't know if there is anything different about the way Autistic children perceive gender. This research hopes to better understand this from the point of view of children, their parents/carers and teachers.

My research has been approved by the School of Psychology Research Ethics Committee. This means that the Committee's evaluation of this ethics application has been guided by the standards of research ethics set by the British Psychological Society.

Why have you been asked to participate?

I am looking to involve Key Stage 2 pupils who have a diagnosis of Autism Spectrum Disorder, along with their parents/carers and a member of school staff who knows them well.

You are quite free to decide whether or not to participate and should not feel coerced.

What will your child's participation involve?

- I am asking your child to participate in three short activities in a quiet room in school with an adult that knows them well.
- These activities will take around 10 minutes each to complete and will be arranged to minimise disruption to your child's learning.
- I will lead the sessions using video calling. These sessions will be recorded so that I can write up what has been discussed, but recordings will be stored safely and destroyed once my thesis is complete.
- Your child will do a craft activity where they will dress paper dolls in a selection of age appropriate and modest clothing. The paper dolls are not anatomically correct. (See below for an example)
- Your child will do a picture sorting activity, where they sort pictures of toys, animals and children into different groups.
- Your child will do a 'show and tell' activity, where they bring a favourite object or toy from around school to show to me. They will have the opportunity to tell me why they chose it.

What will your participation involve?

- **You** will be asked to participate in a short interview, which will be like having an informal chat with me by video call or telephone, which is expected to take no more than 45 minutes.
- Before answering questions, the researcher will share back your child's thoughts to **you and your child**.
- I will video record the discussion session remotely.

To thank you for your participation in my research, you will receive a £10 Amazon voucher.

What if I find taking part difficult?

It is not anticipated that you or your child will have been adversely affected by taking part in the research, and all reasonable steps have been taken to minimise

potential harm. Nevertheless, it is still possible that your participation – or its after-effects – may have been challenging, distressing or uncomfortable in some way. If you have been affected in any of those ways, I will share a debrief letter with you that outlines some available support that you may find helpful.

Your taking part will be safe and confidential

Your privacy and safety will be respected at all times.

- Participants will not be identified by the data collected, on any written material resulting from the data collected, or in any write-up of the research.
- Participants do not have to answer all questions asked of them and can stop their participation at any time.

If, during the course of your participation, you or your child share anything that makes me feel worried about your safety or the safety of someone else, then I may need to share your disclosure with the relevant authority.

What will happen to the information that you provide?

- I will use the information you provide to produce a report for my research project. To ensure your confidentiality is maintained, no identifying information will be included in this report, including names, school names or the name of the Local Authority, so nobody will be able to attribute anything to you.
- I will store your data securely for a period of three years, after which it will be destroyed.

What if you want to withdraw?

You are free to withdraw from the research study at any time without explanation, disadvantage or consequence. Separately, you may also request to withdraw your data even after you have participated data, provided that this request is made within three weeks of the data being collected (after which point the data analysis will begin, and withdrawal will not be possible).

Contact Details

If you would like further information about my research or have any questions or concerns, please do not hesitate to contact me.

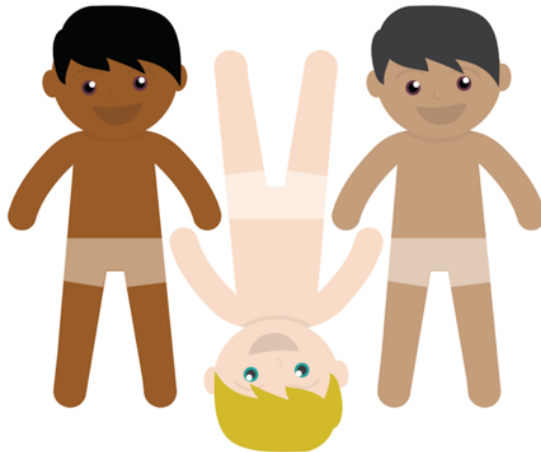
Carla Wasilonek,

If you have any questions or concerns about how the research has been conducted, please contact the research supervisor Mary Robinson. School of Psychology, University of East London, Water Lane, London E15 4LZ,
Email: m.robinson@uel.ac.uk

or

Chair of the School of Psychology Research Ethics Sub-committee: Dr Tim Lomas, School of Psychology, University of East London, Water Lane, London E15 4LZ.
(Email: t.lomas@uel.ac.uk)

Paper dolls that will be used in the craft activity





PARTICIPANT INFORMATION SHEET – STAFF

You are being invited to participate in a research study. Before you agree it is important that you understand what your participation would involve. Please take time to read the following information carefully.

Who am I?

I am a postgraduate student in the School of Psychology at the University of East London and am studying for a Professional Doctorate in Educational Psychology. As part of my studies I am conducting the research you are being invited to participate in.

What is the research title?

Making sense of gender: The perspectives of primary school aged children on the Autism spectrum

What are the aims of the study?

Although we know quite a lot about how neurotypical children develop their awareness of gender, we don't know if there is anything different about the way Autistic children perceive gender. This research hopes to better understand this from the point of view of children, their parents/carers and teachers.

My research has been approved by the School of Psychology Research Ethics Committee. This means that the Committee's evaluation of this ethics application has been guided by the standards of research ethics set by the British Psychological Society.

Why have you been asked to participate?

I am looking to involve Key Stage 2 pupils who have a diagnosis of Autism Spectrum Disorder, along with their parents/carers and teacher. You have been selected because you work with a child and family who have consented to take part.

You are quite free to decide whether or not to participate and should not feel coerced.

What will your participation involve?

- I am asking you to facilitate a child that knows you well to participate in three short activities in a quiet room in school: craft, sorting and show and tell.
- These activities will take around 10 minutes each to complete and will be arranged at a time to minimise disruption to the child's learning and to your work.
 - I will lead the sessions using video calling, with paired resources. These sessions will be recorded so that I can write up what has been discussed, but recordings will be stored safely and destroyed once my thesis is complete.
 - Prior to these sessions, I will meet with you to share the resources, discuss technology, the activities and answer any questions you might have. I will provide you with an information sheet.
- I will ask you to participate in a short interview with me, expected to last no more than 45 minutes. We will do this by video calling or by telephone. This interview will be recorded.

I will not be able to pay you for participating in my research, but your participation would be very valuable in helping to develop knowledge and understanding of my research topic.

What if I find taking part difficult?

It is not anticipated that you or your child will have been adversely affected by taking part in the research, and all reasonable steps have been taken to minimise potential harm. Nevertheless, it is still possible that your participation – or its after-effects – may have been challenging, distressing or uncomfortable in some way. If you have been affected in any of those ways, I will share a debrief letter with you that outlines some available support that you may find helpful.

Your taking part will be safe and confidential

Your privacy and safety will be respected at all times.

- Participants will not be identified by the data collected, on any written material resulting from the data collected, or in any write-up of the research.
- Participants do not have to answer all questions asked of them and can stop their participation at any time.

If, during the course of your participation, you share anything that makes me feel worried about your safety or the safety of someone else, then I may need to share your disclosure with the relevant authority.

What will happen to the information that you provide?

- will use the information you provide to produce a report for my research project. To ensure your confidentiality is maintained, no identifying information will be included in this report, so nobody will be able to attribute anything to you.
- I will store your data securely for a period of three years, after which it will be destroyed.

What if you want to withdraw?

You are free to withdraw from the research study at any time without explanation, disadvantage or consequence. Separately, you may also request to withdraw your data even after you have participated data, provided that this request is made within 7 days of the data being collected (after which point the data analysis will begin, and withdrawal will not be possible).

Contact Details

If you would like further information about my research or have any questions or concerns, please do not hesitate to contact me.

Carla Wasilonek,

If you have any questions or concerns about how the research has been conducted, please contact the research supervisor Mary Robinson. School of Psychology, University of East London, Water Lane, London E15 4LZ,
Email: m.robinson@uel.ac.uk

or

Chair of the School of Psychology Research Ethics Sub-committee: Dr Tim Lomas, School of Psychology, University of East London, Water Lane, London E15 4LZ.
(Email: t.lomas@uel.ac.uk)



UNIVERSITY OF EAST LONDON

Consent to participate in a research study – PARENT/CARER

Making sense of gender: The perspectives of primary school aged children on the Autism spectrum

I have read the information sheet relating to the above research study and have been given a copy to keep. The nature and purposes of the research have been explained to me, and I have had the opportunity to discuss the details and ask questions about this information. I understand what is being proposed and the procedures in which I will be involved have been explained to me.

I understand that my child and I's involvement in this study, and particular data from this research, will remain strictly confidential. Only the researcher(s) involved in the study will have access to identifying data. Where possible, my confidentiality will be maintained unless a disclosure is made that indicates that I or someone else is at serious risk of harm. Such disclosures may be reported to the relevant authority. It has been explained to me what will happen once the research study has been completed.

I hereby freely and fully consent to participate in the study which has been fully explained to me. Having given this consent I understand that I have the right to withdraw from the study at any time without disadvantage to myself and without being obliged to give any reason. I also understand that should I withdraw; the researcher reserves the right to use my anonymous data after analysis of the data has begun.

Parent / Carer's Signature

Date

Parent/Carer Name (BLOCK CAPITALS)

.....

Email

address.....

.....

Child's Name

.....DOB:

.....



UNIVERSITY OF EAST LONDON

Consent to participate in a research study - STAFF

Making sense of gender: The perspectives of primary school aged children on the Autism spectrum

I have the read the information sheet relating to the above research study and have been given a copy to keep. The nature and purposes of the research have been explained to me, and I have had the opportunity to discuss the details and ask questions about this information. I understand what is being proposed and the procedures in which I will be involved have been explained to me.

I understand that my involvement in this study, and particular data from this research, will remain strictly confidential. Only the researcher(s) involved in the study will have access to identifying data. Where possible, my confidentiality will be maintained unless a disclosure is made that indicates that I or someone else is at serious risk of harm. Such disclosures may be reported to the relevant authority. It has been explained to me what will happen once the research study has been completed.

I hereby freely and fully consent to participate in the study which has been fully explained to me. Having given this consent I understand that I have the right to withdraw from the study at any time without disadvantage to myself and without being obliged to give any reason. I also understand that should I withdraw; the researcher reserves the right to use my anonymous data after analysis of the data has begun.

Participant's Signature

Date

Participant's Name (BLOCK CAPITALS)

.....

Email address

.....

.....

Appendix T

Child Information and Consent Booklet

Information about the Project



Information about my project

I am doing a research project for my university course.

Doing research is like being a detective to find answers to questions.



I would like to play some games with you to find out what children think about toys and clothes.



I will write up what I find into a project.



1

Saying "No"

Helping with my project is something you can choose to do.



It will be your choice to play the games with me.

I will ask you to write your name to show my teachers that you chose to take part.



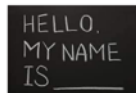
BUT

You can say "No" if you decide you do not want to play a game with me.

You can decide you don't want to be involved in my project any more.



2



Choosing a different name

When I write up my project, I will make sure that what you said is private.

You can choose a new name that I will use if I write about anything that you said.

People will be able to read what you think but they won't know your real name in the project.

3

Project agreement

My name is

Please circle

I want to take part in the project.	Yes 	No 
I understand that people won't see my name in the project.	Yes 	No 
I know that I can say "No" if I don't want to play a game.	Yes 	No 
I know that I can say I don't want to be in the project anymore	Yes 	No 
I would like to choose a name for you to use for me in your project	Yes 	No 

Please call me

In your project.

Appendix U

Assent Plan

My Personalised Assent Plan

My Name is...Bob.....

I can tell you I am content by:

- ☒ Using words
 - ☐ Using symbols
 - ☐ Using signing
 - ☒ Using facial expressions
 - ☐ Using vocalisations
 - ☐ Something else
-smiles, ...makes jokes, positive comments
-
-

I can tell you I am happy to have a go at something by:

- ☒ Using words
 - ☐ Using symbols
 - ☐ Using signing
 - ☐ Using facial expressions
 - ☐ Using vocalisations
 - ☐ Something else
-Facial
-
-

.....he will say 'ok'

I can tell you I am starting to feel uncomfortable by:

- ☒ Using words
- ☐ Using symbols
- ☐ Using signing
- ☒ Using facial expressions
- ☐ Using vocalisations
- ☐ Something else

.....you needs to look out for signs that he is uncomfortable, such as
scrunching up his
face.....

.....

I can tell you I feel distressed by:

- ☒ Using words
- ☐ Using symbols

- ☐ Using signing
- ☒ Using facial expressions
- ☐ Using vocalisations
- ☐ Something else

.....gesture – he will put his hand on head.... He will talk about what makes him upset ...he might cry

.....

.....

I can tell you want to stop doing something by:

- ☒ Using words
- ☐ Using symbols
- ☐ Using signing
- ☐ Using facial expressions
- ☐ Using vocalisations
- ☒ Something else

.....body language

.....

.....He will physically stop doing what he is doing, and say “that’s it, I’m done”.....

.....

I can be encouraged to have one more go by:

- ☒ Using words
- ☐ Using symbols
- ☐ Using signing
- ☐ Using facial expressions
- ☐ Using vocalisations
- ☐ Something else

.....

.....

.....encouraging words - be clear about when it will be over.

.....

I will tell you or show you that I am not able to carry on any more by:

.....

.....

.....looks ‘glazed over’, stops and stares, won’t engage

.....

.....

If I am distressed, you can help calm me down by:

.....

.....

...using the zones of regulation. Ask if wants a sip of water. Giving a minute. Positive reinforcement .Reward.

.....
.....
Completed by: Researcher, Özge, Carolina.
03.02.22

Date:

Appendix V
Breakdown of Themes, Subthemes and Corresponding Codes

Theme	Subtheme	Codes and labels
The child's view of the world	Making sense of a world that isn't 'black and white'	<p>1.1.32 <i>I have one of these</i></p> <p>1.1.33 <i>This is familiar to me</i></p> <p>1.2.1 <i>Clothes need to make sense</i></p> <p>1.2.12 <i>I don't have a direct experience of this or somebody I can link this to</i></p> <p>1.2.2 <i>I know somebody that I am linking this to</i></p> <p>1.2.21 <i>confusion makes me uncomfortable</i></p> <p>1.4.34 <i>child linked this situation to their previous learning</i></p> <p>1.4.39 <i>staff feels child is drawing on their own direct experiences</i></p> <p>1.4.40 <i>staff feels that child is confident about binary decisions e.g. boys or girls</i></p> <p>1.4.41 <i>staff feels grey areas are less clear to them</i></p> <p>1.4.44 <i>staff feels that child is making links with other people they know</i></p> <p>1.4.45 <i>staff feels like child is logical</i></p> <p>1.4.46 <i>staff feels that child is black and white</i></p> <p>1.4.51 <i>staff feels like child wants to follow the rules</i></p> <p>3.2.8 <i>maybe the colour confused them</i></p> <p>3.3.73 <i>ambiguity makes my child uncomfortable</i></p> <p>3.3.76 <i>my child likes to categorise people</i></p> <p>3.3.78 <i>how can something be girly if boys are allowed to wear it?</i></p> <p>3.3.79 <i>my child needs clothes to make sense</i></p>

	How they see themselves and others	<p> 1.1.13 <i>pink is for girls</i> 1.1.32 <i>I have one of these</i> 1.1.33 <i>This is familiar to me</i> 1.1.41 <i>Blue is for boys</i> 1.2.12 <i>I don't have a direct experience of this or somebody I can link this to</i> 1.2.13 <i>If you like something you can play with it</i> 1.2.2 <i>I know somebody that I am linking this to</i> 1.3.38 <i>parent feels that child has conventional ideas about dressing</i> 1.3.48 <i>parental interests shaped the child's interests</i> 1.3.55 <i>my child likes computer games</i> 1.3.57 <i>my child shares some interests with his friends</i> 1.3.58 <i>other boys are more interested in sports</i> 1.3.59 <i>my child isn't sporty</i> 1.3.65 <i>my child has a strong sense of how they identify</i> 1.3.66 <i>my child is concerned about their appearance</i> 1.3.67 <i>my child wants to make choices about what they wear</i> 1.3.69 <i>My child is concerned about other children's' opinions</i> 1.4.23 <i>the child has good friends in school</i> 1.4.24 <i>the child is into computer games</i> 1.4.25 <i>computer games are a broad-reaching interest</i> 1.4.26 <i>I think the child's passion supports them to make friends</i> 1.4.49 <i>staff feels child has a strong sense of will</i> 2.3.27 <i>my child has good social awareness</i> 2.3.31 <i>my child doesn't want to feel different at school</i> 2.3.38 <i>my child talks with her friends</i> 2.3.46 <i>my child associates being a woman with having children</i> </p>
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		<p>2.3.47 my child does not want to have children</p> <p>2.3.51 my child knows they are different from their opposite sex sibling</p> <p>2.3.52 my child knows they are the same sex as me</p> <p>2.3.53 my child does not enter their opposite sex sibling's bedroom</p> <p>2.3.54 my child enter my bedroom freely</p> <p>2.4.25 child shares interest in football with opposite sex sibling</p> <p>2.4.33 adults need to support children with their self-expression</p> <p>2.4.50 child wouldn't be pressured by peer pressure</p> <p>3.1.25 I covet toys</p> <p>3.1.26 I share my collection</p> <p>3.2.1 there aren't rules about who can wear what clothes - children should wear whatever they want</p> <p>3.2.11 they know somebody that they seem to be linking this to</p> <p>3.2.4 disappointment about succumbing to stereotypes</p> <p>3.2.5 they own this toy but don't think it's for them</p> <p>3.2.6 they watch these films but don't think it's for them</p> <p>3.2.9 she is a girly girl</p> <p>3.3.55 my child plays as a female character</p> <p>3.3.57 my child plays with their sibling</p> <p>3.3.58 my child plays with their cousins</p> <p>3.3.60 cubs is seen for boys</p> <p>3.3.61 only girls can go to brownies</p> <p>3.3.70 my child plays role play games with their friends</p> <p>3.3.81 I think my child picks up social cues about gender</p> <p>3.3.85 my child talks about getting married</p> <p>3.3.86 my child talks about buying a house</p>
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Self-expression through hobbies, play and interests	Gendered expectations around play	<p> <i>1.1.10 Anybody can play with this toy</i> <i>1.1.29 slime is equally for boys and girls</i> <i>1.1.3 Boys play with trucks/cars</i> <i>1.1.31 Scooters are equally for boys and girls</i> <i>1.1.34 Only girls play with MLP</i> <i>1.1.35 Only girls play with Dolls</i> <i>1.1.37 Only boys can play with cars/trucks</i> <i>1.1.39 Only boys can play with action figures</i> <i>1.1.4 Boys play with superheroes/marvel</i> <i>1.1.6 girls play with princesses</i> <i>1.1.7 Girls play with unicorns/ponies</i> <i>1.1.8 Girls play with dolls</i> <i>1.1.9 Girls play house/families</i> <i>1.3.55 my child likes computer games</i> <i>1.4.24 the child is into computer games</i> <i>2.1.1 Slime is for girls</i> <i>2.1.5 anybody can play with cars/trucks</i> <i>2.1.6 anybody can play with superheroes/marvel</i> <i>2.1.7 anybody can play house/families</i> <i>2.1.8 MLP is for anybody</i> <i>2.1.9 anybody can play with dolls</i> <i>2.3.41 my child enjoys cookery</i> <i>2.3.43 my child likes to get their hands dirty</i> <i>2.3.44 my child enjoys baking</i> <i>2.4.47 on non-uniform days, girls think they should be dressed as princesses</i> </p>

		<p>3.1.19 girls like Disney</p> <p>3.1.24 I dress like my favourite characters</p> <p>3.3.35 my child plays with dolls</p> <p>3.3.36 my child is into Disney characters</p> <p>3.3.37 my child plays house/families</p> <p>3.3.55 my child plays as a female character</p> <p>3.3.56 my child is into princesses</p> <p>3.3.61 only girls can go to brownies</p> <p>3.3.62 my child has stereotypically same-gender interests</p>
	But if you like it, you should play with it	<p>1.1.30 Dobbie is a little bit more for boys</p> <p>1.1.36 Toy is generally for girls</p> <p>1.2.14 A boy wouldn't own this but in certain circumstances might play with it</p> <p>1.2.15 Harry potter/Dobbie is more for boys</p> <p>1.3.65 my child has a strong sense of how they identify</p> <p>1.3.66 my child is concerned about their appearance</p> <p>1.3.67 my child wants to make choices about what they wear</p> <p>1.3.69 My child is concerned about other children's' opinions</p> <p>1.4.49 staff feels child has a strong sense of will</p> <p>2.1.10 Dolls are more for girls</p> <p>2.1.4 Scooters are more for boys</p> <p>2.3.31 my child doesn't want to feel different at school</p> <p>2.3.43 my child likes to get their hands dirty</p> <p>2.4.11 child plays football</p> <p>2.4.12 child plays dodgeball</p> <p>2.4.50 child wouldn't be pressured by peer pressure</p>

		<p>3.1.25 I covet toys</p> <p>3.1.6 House/family is more for girls</p> <p>3.1.7 slime is a bit more for boys</p> <p>3.1.8 HP/Dobbie is a little more for girls</p> <p>3.2.5 they own this toy but don't think It's for them</p> <p>3.2.6 they watch these films but don't think it's for them</p> <p>3.3.34 my child likes construction toys</p> <p>3.3.43 boys don't want to let the girls play football</p> <p>3.3.49 my child is into climbing things</p> <p>3.3.59 my child has stereotypically cross-gender interests</p> <p>3.3.60 cubs is seen for boys</p> <p>3.3.63 girls can go to cubs</p>
	Curating their own passions and wider interests	<p>1.1.55 I collect toys</p> <p>1.1.56 I design my own games</p> <p>1.1.60 I hold onto games/toys</p> <p>1.2.21 confusion makes me uncomfortable</p> <p>1.3.48 parental interests shaped the child's interests</p> <p>1.3.52 my child cannot let go of his toys</p> <p>1.3.55 my child likes computer games</p> <p>1.3.57 my child shares some interests with his friends</p> <p>1.3.58 other boys are more interested in sports</p> <p>1.3.59 my child isn't sporty</p> <p>1.3.63 child has difficulties socialising/feels isolated</p> <p>1.3.65 my child has a strong sense of how they identify</p> <p>1.3.66 my child is concerned about their appearance</p> <p>1.3.67. my child wants to make choices about what they wear</p>

		<p>1.3.69 My child is concerned about other children's' opinions</p> <p>1.4.23 the child has good friends in school</p> <p>1.4.24 the child is into computer games</p> <p>1.4.25 computer games are a broad-reaching interest</p> <p>1.4.26 I think the child's passion supports them to make friends</p> <p>1.4.34 child linked this situation to their previous learning</p> <p>1.4.39 staff feels child is drawing on their own direct experiences</p> <p>1.4.40 staff feels that child is confident about binary decisions e.g. boys or girls</p> <p>1.4.41 staff feels grey areas are less clear to them</p> <p>1.4.44 staff feels that child is making links with other people they know</p> <p>1.4.45 staff feels like child is logical</p> <p>1.4.46 seeing the world in black and white</p> <p>1.4.49 staff feels child has a strong sense of will</p> <p>1.4.51 staff feels like child wants to follow the rules</p> <p>2.1.13 I like interesting books</p> <p>2.1.14 I like books with chapters</p> <p>2.3.31 my child doesn't want to feel different at school</p> <p>2.3.38 my child talks with her friends</p> <p>2.4.16 the child may need encouragement to join in with peers</p> <p>2.4.25 child shares interest in football with opposite sex sibling</p> <p>2.4.50 child wouldn't be pressured by peer pressure</p> <p>3.1.10 Girls read books</p> <p>3.1.11 Dolls are for bedtime</p> <p>3.1.12 Dolls are for cuddling</p> <p>3.1.13 My favourite thing needs to be kept clean</p> <p>3.1.14 I don't like when my doll is different</p>
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		<p>3.1.25 I covet toys</p> <p>3.1.26 I share my collection</p> <p>3.2.5 they own this toy but don't think It's for them</p> <p>3.2.6 they watch these films but don't think it's for them</p> <p>3.2.8 maybe the colour confused them</p> <p>3.3.38 my child has inherited toys through family members</p> <p>3.3.57 my child plays with their sibling</p> <p>3.3.58 my child plays with their cousins</p> <p>3.3.60 cubs is seen for boys</p> <p>3.3.61 only girls can go to brownies</p> <p>3.3.70 my child plays role play games with their friends</p> <p>3.3.76 my child likes to categorise people</p> <p>3.3.78 how can something be girly if boys are allowed to wear it?</p>
	How others perceive their play	<p>1.3.48 parental interests shaped the child's interests</p> <p>1.3.55 my child likes computer games</p> <p>1.3.57 my child shares some interests with his friends</p> <p>1.3.58 other boys are more interested in sports</p> <p>1.3.59 my child isn't sporty</p> <p>1.3.63 child has difficulties socialising/feels isolated</p> <p>1.4.23 the child has good friends in school</p> <p>1.4.24 the child is into computer games</p> <p>1.4.25 computer games are a broad-reaching interest</p> <p>1.4.26 I think the child's passion supports them to make friends</p> <p>2.3.36 my child is worried about making friends in secondary school</p> <p>2.3.37 my child finds it hard to mix with new people</p> <p>2.3.38 my child talks with her friends</p>

		<p>2.4.16 the child may need encouragement to join in with peers</p> <p>2.4.19 child is very good with younger children</p> <p>2.4.21 child is caring</p> <p>2.4.25 child shares interest in football with opposite sex sibling</p> <p>3.1.26 I share my collection</p> <p>3.2.9 she is a girly girl</p> <p>3.3.41 my child is sporty</p> <p>3.3.50 my child is adventurous</p> <p>3.3.57 my child plays with their sibling</p> <p>3.3.58 my child plays with their cousins</p> <p>3.3.60 cubs is seen for boys</p> <p>3.3.61 only girls can go to brownies</p> <p>3.3.70 my child plays role play games with their friends</p>
Making sense of clothes, making sense of people	Doing clothes the traditional way	<p>1.1.13 pink is for girls</p> <p>1.1.14 girls wear skirts and dresses</p> <p>1.1.15 Girls wear yellow</p> <p>1.1.16 Boys wear trousers/joggers/pants</p> <p>1.1.17 Boys wear grey</p> <p>1.1.18 Anybody can wear denim</p> <p>1.1.19 Anybody can wear jeans</p> <p>1.1.20 Anybody can wear trousers</p> <p>1.1.21 Anybody can wear dungarees</p> <p>1.1.22 Anybody can wear shorts</p> <p>1.1.23 anybody can wear stripes</p> <p>1.1.24 Anybody can wear multi-colours/rainbows</p>

		<p>1.1.25 Anybody can wear superhero's/marvel</p> <p>1.1.26 Anybody can wear plain t-shirts</p> <p>1.1.27 Anybody can wear dinosaurs</p> <p>1.1.28 Anybody can wear short or long sleeves</p> <p>1.1.40 Boys wear shirts</p> <p>1.1.41 Blue is for boys</p> <p>1.1.42 Anybody can wear blue</p> <p>1.1.43 Boys wear dark trousers</p> <p>1.1.48 girls wear bright/light colours</p> <p>1.1.49 dresses and skirts are only for girls</p> <p>1.1.50 Anybody can wear purple</p> <p>1.1.51 Anybody can wear shirts</p> <p>1.2.17 men wear shirts</p> <p>1.2.18 men wear dark trousers</p> <p>1.2.20 young girls wear 'cute' clothes</p> <p>2.1.12 anybody can wear red</p> <p>2.1.2 boys wear superhero's</p> <p>2.1.3 boys wear dinosaurs</p> <p>2.2.2 There are rules about who can wear what clothes</p> <p>3.1.1 Girls wear bows</p> <p>3.1.2 Girls wear confetti</p> <p>3.1.23 girls can wear trousers</p> <p>3.1.3 boys have pockets</p> <p>3.1.4 Anybody can wear pink</p> <p>3.1.5 Anybody can wear bright/light colours</p>
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	Respecting self-expression	<p>1.2.21 confusion makes me uncomfortable</p> <p>1.3.65 my child has a strong sense of how they identify</p> <p>1.3.66 my child is concerned about their appearance</p> <p>1.3.67 my child wants to make choices about what they wear</p> <p>1.3.69 My child is concerned about other children's' opinions</p> <p>1.4.34 child linked this situation to their previous learning</p> <p>1.4.39 staff feels child is drawing on their own direct experiences</p> <p>1.4.40 staff feels that child is confident about binary decisions e.g. boys or girls</p> <p>1.4.41 staff feels grey areas are less clear to them</p> <p>1.4.44 staff feels that child is making links with other people they know</p> <p>1.4.45 staff feels like child is logical</p> <p>1.4.46 seeing the world in black and white</p> <p>1.4.51 staff feels like child wants to follow the rules</p> <p>2.3.31 my child doesn't want to feel different at school</p> <p>3.1.25 I covet toys</p> <p>3.2.5 they own this toy but don't think It's for them</p> <p>3.2.6 they watch these films but don't think it's for them</p> <p>3.2.8 maybe the colour confused them</p> <p>3.3.76 my child likes to categorise people</p> <p>3.3.78 how can something be girly if boys are allowed to wear it?</p>
The impact of the immediate environment	Family and the impact of values	<p>1.3.29 Respecting others</p> <p>1.3.61 I encourage my child to follow their interests</p> <p>3.3.1 gender and gender identity is something we explicitly talk about at home</p> <p>3.3.18 in our house, males were caregivers and females breadwinners</p> <p>3.3.2 it is important to us that our child knows that gender identity is different from biological sex</p>

		<p>3.3.21 sex roles are something we actively speak about at home</p> <p>3.3.22 we fight against stereotypes</p> <p>3.3.25 my child can wear what they want to wear</p> <p>3.3.28 baby clothes are unnecessarily gendered</p> <p>3.3.29 it's hard to find things for baby girls that aren't pink</p> <p>3.3.47 girls can play football</p> <p>3.3.74 we discuss trans+ identities at home</p> <p>3.3.75 my child is accepting of trans+ identities</p> <p>1.2.19 cross-dressing is humorous</p> <p>1.3.1 gender is binary</p> <p>1.3.43 trans+ is not normal in my culture</p> <p>1.3.60 I try to encourage my child to have gender-stereotypical interests</p> <p>1.3.8 women have a maternal instinct</p> <p>2.3.6 experiencing different countries has not affected how the parent sees gender</p> <p>2.3.7 LGBT+ is not spoken about in home country</p> <p>1.3.12 child's grandparents were born in a different country</p> <p>1.3.18 parent experiences have had a direct impact on how they consciously choose to parent</p> <p>1.3.2 parent was born in another country</p> <p>1.3.28 parent experienced more liberal culture when I was a teenager</p> <p>1.3.3 parent was raised by their parents</p> <p>1.3.31 parent's school promoted tolerance</p> <p>1.3.4 parent was raised by their grandparents</p> <p>1.3.5 parent has lived in different countries / experienced different cultures</p> <p>1.3.6 parent has strong links to home culture</p>
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		<p>3.3.15 my parents were progressive and fought against gender stereotypes</p> <p>3.3.16 my dad is a feminist</p> <p>2.4.24 child's older sibling was always protective of the child</p> <p>2.4.25 child shares interest in football with opposite sex sibling</p> <p>3.3.57 my child plays with their sibling</p> <p>3.3.78 how can something be girly if boys are allowed to wear it?</p>
	School and the importance of self-expression	<p>1.2.13 If you like something you can play with it</p> <p>1.4.37 staff feels that school tries not to reinforce gender stereotypes</p> <p>2.4.33 adults need to support children with their self-expression</p> <p>2.4.34 children should play with what they want to play with</p> <p>2.4.41 football is for everybody</p> <p>2.4.42 every sport is for everybody</p> <p>2.4.43 any child can play any game</p> <p>3.2.1 children should wear whatever they want</p> <p>3.3.32 parent feels school upholds sexist stereotypes</p> <p>3.3.44 only boys can play football</p> <p>2.4.8 staff feels child is sporty</p>
	Other children and the role of peer pressure	<p>1.2.5 I am friends with the opposite sex</p> <p>1.4.29 the child mostly has same sex friends</p> <p>1.4.31 the child is happy to work with cross-sex friends</p> <p>3.3.66 my child's friends are mostly of the same gender</p> <p>3.3.67 my child played with the other gender more when they were younger</p> <p>1.4.32 sex-segregated play is common in school</p> <p>2.4.40 football is perceived as for boys only</p> <p>3.3.43 boys don't want to let the girls play football</p> <p>3.3.44 only boys can play football</p>

		<p>3.3.46 girl and boy segregation in the playground</p> <p>3.3.64 girls need boy-free space</p> <p>1.4.49 staff feels child has a strong sense of will</p> <p>2.4.50 child wouldn't be pressured by peer pressure</p> <p>1.3.65 my child has a strong sense of how they identify</p> <p>1.3.66 my child is concerned about their appearance</p> <p>1.3.67 my child wants to make choices about what they wear</p> <p>1.3.69 My child is concerned about other children's' opinions</p> <p>2.3.31 my child doesn't want to feel different at school</p> <p>3.1.25 I covet toys</p> <p>3.2.5 they own this toy but don't think it's for them</p> <p>3.2.6 they watch these films but don't think it's for them</p> <p>1.3.48 parental interests shaped the child's interests</p> <p>1.3.55 my child likes computer games</p> <p>1.3.58 other boys are more interested in sports</p> <p>1.3.59 my child isn't sporty</p> <p>1.4.23 the child has good friends in school</p> <p>1.4.24 the child is into computer games</p> <p>1.4.25 computer games are a broad-reaching interest</p> <p>1.4.26 I think the child's passion supports them to make friends</p> <p>2.3.38 my child talks with her friends</p> <p>2.4.25 child shares interest in football with opposite sex sibling</p> <p>3.1.26 I share my collection</p> <p>3.3.57 my child plays with their sibling</p> <p>3.3.58 my child plays with their cousins</p> <p>3.3.60 cubs is seen for boys</p>
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		<p>3.3.61 <i>only girls can go to brownies</i></p> <p>3.3.70 <i>my child plays role play games with their friends</i></p>
<p>Gendered messages in the wider world we live in</p>	<p>The power of capitalism and the mass media</p>	<p>1.1.55 <i>I collect toys</i></p> <p>1.1.60 <i>I hold onto games/toys</i></p> <p>1.3.52 <i>my child cannot let go of his toys</i></p> <p>3.1.25 <i>I covet toys</i></p> <p>1.2.10 <i>this is a 'norm' I've heard</i></p> <p>1.2.11 <i>Adverts tell me who can play with this</i></p> <p>1.2.22 <i>boys can probably wear skirts</i></p> <p>2.3.49 <i>gender isn't something we explicitly talk about at home</i></p> <p>3.1.17 <i>Toy interests influenced by TV/film</i></p> <p>3.3.30 <i>marketing gives us messages about gender</i></p> <p>3.3.31 <i>media gives us messages about gender</i></p> <p>3.3.27 <i>messages about gender are everywhere</i></p>
	<p>The views of extended family and the older generations</p>	<p>1.3.10 <i>parents' extended family live in close proximity</i></p> <p>1.3.11 <i>parents have a large extended family</i></p> <p>1.3.12 <i>child's grandparents were born in a different country</i></p> <p>1.3.15 <i>child has links with extended family abroad</i></p> <p>1.3.26 <i>older generations uphold the stereotypical gender norms</i></p> <p>1.3.6 <i>parent has strong links to home culture</i></p> <p>3.3.14 <i>grandparents were disappointed that we haven't had a boy</i></p> <p>1.3.25 <i>parent's first culture has stereotypical gender expectations</i></p> <p>1.4.15 <i>my parent's culture has traditional ideas about how people should dress</i></p>






Appendix W
Results of Sorting and Scaling Activity


Participant	Able to categorise?	Clothes for Boys	Clothes for Girls	Clothes for Boys and Girls	Toys for Boys	Toys for Girls	Toys for Boys and Girls
Bob	Yes	Tracksuit bottoms	Dress Pink short set	Spiderman shirt Dinosaur shirt Stripy shorts Dungarees T-shirt Jeans	Hulk Infinity Gauntlet Remote Control Car	My Little Pony Sylvanian Families L.O.L. Doll	Dobbie Scooter Slime
Ava	Yes	Tracksuit bottoms Spiderman shirt Dinosaur shirt	Dress Pink short set	Stripy shorts Dungarees T-shirt Jeans	Hulk Infinity Gauntlet Remote Control Car	My Little Pony Sylvanian Families L.O.L. Doll Slime	Dobbie Scooter
Suri	Yes	Tracksuit bottoms Spiderman shirt Dinosaur shirt	Dress Pink short set	Stripy shorts Dungarees T-shirt Jeans	Hulk Infinity Gauntlet Remote Control Car	My Little Pony Sylvanian Families L.O.L. Doll	Dobbie Scooter

						Slime	
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Results of Scaling Activity

Toy	Rating			Average
	Bob	Ava	Suri	
	10	9	10	9.7
	10	7	9	8.7
	10	3	10	7.7






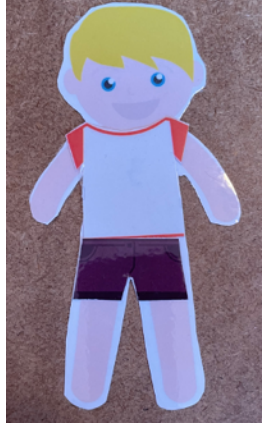



	0	1	0	0.3
	0.9	3	2	2
	0	4	0	1.3
	5	5	5.5	5.2
	5	7	7	6.3

	6	4	4	4.7
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Qualitative Descriptor of Ratings

Rating	Interpreted Qualitative Descriptor
0*	Only for girls
1	Generally for girls
2	Mainly for girls
3	More for girls than boys
4	A little bit more for girls than boys
5*	Equally for boys and girls
6	A little bit more for boys than girls
7	More for boys than girls
8	Mainly for boys
9	Generally for boys
10*	Only for boys

Appendix X
Gingerbread Results

Participant	Boy	Girl	Boy or Girl (Child)
Bob			
Ava			
Suri			

Appendix Y

Diary Extract: Differing Values

Monday, 7th February 2022: *The thing that struck me in talking with Amanda was how very different our backgrounds and experiences are. She felt so strongly about traditional gender roles and the gender binary, which I can see relates to her own upbringing in Africa. She has lived in England since she was a young teen, but still she told me that she still sees things in the same way that she did as a child. I could see this in how she described Ava's performance as 'right' in the gingerbread activities. Her views are so different from my own, and this is something I am going to need to be mindful of when I go on to analyse my data.*

Appendix Z

Diary Extract: Child Participation

Tuesday, 8th February 2022: I've now completed all my data collection activities with the children and had the feedback and co-construction meetings with them and their parents. Well, tried to, Ava didn't want to talk to me at all yesterday, and Suri didn't want to join her parents this evening. I'm really conscious about participation. I wish that these activities could have been chosen by the children so that they could tell me what is important to them, and it be directed by them, rather than me imposing activities on them. With Suri I could see the difference in her when she did her show and tell compared to the activities- she really came alive when talking about Ana, but imagine if she had been that enthusiastic when completing the other activities, how much richer the data could have been!

Appendix AA Diary Extract:
The Implied Gender Binary

Saturday, 9th January 2021: *Trying to plan my data collection activities so that they can be carried out remotely whilst remaining accessible for children with a range of abilities is something I am really struggling with. I've selected a sorting activities as this should be so familiar with the children. Category names are something I'm struggling with a bit more though. By having 'boys and girls' as a third category, I am trying to indicate that any child can play with it, but it implies that there are only boys or girls. I don't subscribe to the idea of the gender binary, and I don't want to impose this on children. However, I need to remember that gender is so abstract. Maybe this is the best I can do?*