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"I want to fit in... but I don't want to change myself fundamentally": A qualitative exploration of the relationship between masking and mental health for autistic teenagers

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ABSTRACT

Background: Previous research has identified an association between masking and mental health for autistic people. However, the direction of causality and mechanisms involved in this relationship are not well understood. This qualitative study aimed to investigate autistic teenagers' experiences of masking, mental health and how the two develop and interact.

Methods: Twenty autistic teenagers took part in a semi-structured interview. The interviews were analysed using Reflexive Thematic Analysis.

Results: From the analysis, one theme was identified to conceptualise masking as described by participants. Five more inter-related themes were identified, each involved both in the relationship between masking and mental health and conversely in the relationship between authenticity and mental health. Participants described how masking and mental health both influence each other, and both are influenced by social and environmental factors.

Conclusions: The findings are consistent with previous research indicating that masking is associated with mental health difficulties. Our analysis presents a broader conceptualisation of masking than previously defined in the literature, placing social oppression of autistic people at the heart of the relationship between masking and mental health. The findings have implications for diagnostic services, post-diagnostic support and therapeutic interventions, highlighting the need to challenge deficit-based narratives of autism.

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1. Introduction

Autism represents one form of neurodivergence¹ and is characterised by differences in social communication, sensory, cognitive and emotional processing, sociality and interests (American Psychiatric Association, 2013). Using current diagnostic tools and conventions, prevalence rates suggest that 1.1% of people living in the UK are autistic (Baird et al., 2006; Brugha et al., 2009, 2012). However, it is well documented that current diagnostic tools are less sensitive to diagnosing women and girls, and people with higher cognitive abilities, and so it is possible that these prevalence figures are underestimates of the true proportion of the population who are autistic (Kirkovski, Enticott, & Fitzgerald, 2013; Ratto et al., 2018).

Across the life span, autistic people are more likely to experience co-occurring mental health conditions than non-autistic people (Kim, Szatmari, Bryson, Streiner, & Wilson, 2000; Lai et al., 2019; Mazzone et al., 2013; Rai et al., 2018). Simonoff et al. (2008) assessed the prevalence of mental health difficulties in a population-derived sample of autistic adolescents, aged 10–14, and found that 70% experienced at least one mental health condition. Varying explanations have been proposed to make sense of these findings.

One explanation highlights the overlap between autistic traits and experiences of mental health difficulties, for instance social anxiety (Cath, Ran, Smit, Van Balkom, & Comijs, 2008). This explanation is weakened by evidence that traits that overlap between social anxiety and autism, such as social communication differences, are superficial and empirically distinguishable from one another (for example; Pickard, Rijsdijk, Happé, & Mandy, 2017). Another explanation of the high co-occurrence of autism and some mental health difficulties is that they share common underlying causes. In support of this idea, research has identified some overlapping genetic and neural underpinnings of autism and some mental health difficulties (Cross-Disorder Group of the Psychiatric Genomics Consortium, 2013; Hollocks & et al., 2014). However, the total amount of shared variance explained by genetic overlap between autism and mental health conditions is small (Rylaarsdam & Guemez Gamboa, 2019).

Another hypothesis is that the experience of being autistic, or having autistic traits, has a direct impact on one's mental health. For instance, autistic traits such as sensory processing differences could make one's experience of the word innately more stressful and anxiety-provoking (Ozsivadjian, Knott, & Magiati, 2012). Indeed, sensory sensitivities, alexithymia (difficulties identifying and describing feelings) and social communication differences are each associated with an increased chance of experiencing mental health difficulties (Milosavljevic et al., 2016; Rai et al., 2018; Tseng, Fu, Cermak, Lu, & Shieh, 2011).

Another avenue of explanation has considered autism as an indirect risk factor for mental health difficulties. This posits that autistic people's increased chance of experiencing mental health difficulties is mediated by social, environmental and contextual factors (e.g., Brede et al., 2020). Such an approach is in line with the social model of disability (Shakespeare, 2006), as it seeks to move away from locating problems within individuals and instead seeks to describe how external, social factors are often the root of disabling experiences. This can be applied to the mental health experiences of autistic people. Autistic people, across the lifespan, are more likely to have experienced victimisation, bullying, trauma and a range of other life events known to be risk factors for the development of mental health difficulties (Berg, Shiu, Acharya, Stolbach, & Msall, 2016; Griffiths et al., 2019). For example, experiences of bullying mediate the association between social communication difficulties and depression (Rai et al., 2018). It appears that non-autistic people's attitudes and behaviour towards autistic people also impacts mental health. Autistic people who experience depression perceive lower autism acceptance from others and have lower personal autism acceptance (Cage, Di Monaco, & Newell, 2018). Milton (2013c) describes the broad societal tendency to pathologise and ostracise people who do not conform to social normative standards and the oppressive impact this has on autistic people.

Masking, or 'social camouflaging', may be another important factor in understanding why autistic people are more likely to experience mental health difficulties and particularly how this is mediated by the social and environmental context (see Cook, Hull, Crane & Mandy, 2021 for review). We define masking as the experience of changing oneself in order to fit in with the expectation of others, specifically within the context of hiding or changing autistic characteristics, which may overlap with more general experiences of impression management (Ai, Cunningham, & Lai, 2022; Lawson, 2020). Autistic people have described experiences of suppressing aspects of their authentic, autistic selves in social situations, and of 'putting on an act' to present oneself as neurotypical (Hull et al., 2017).

Masking can involve deliberately and consciously using specific strategies, for instance self-monitoring body language and facial expressions, developing a 'script' for social situations, or forcing oneself to make eye contact (Cook, Hull, Crane, & Mandy, 2021; Hull et al., 2019). However, accounts also suggest that masking can also develop and be maintained subconsciously (Pearson & Rose, 2021). For instance, autistic people diagnosed in late adolescence or adulthood have described masking unconsciously when undiagnosed (Bargiela, Steward, & Mandy, 2016). Furthermore, some autistic people have emphasised how masking can become so automatic and pervasive while navigating 'the neurotypical world' that aspects of one's identity can become confusing, and it can feel unclear even to the individual where the mask begins and ends (Bargiela et al., 2016; Hull et al., 2017; Tierney, Burns, & Kilbey, 2016).

Masking is driven by multiple challenges faced by autistic people. It can develop as a protective mechanism to avoid reexperiencing bullying, rejection, discrimination or ostracism (Cage & Troxell-Whitman, 2019; Hull et al., 2017). Research suggests

¹ Neurodiversity is a non-pathologising term, originally coined by Judy Singer in 1998, used to describe the wide variety in neurological profiles found within the human species. Someone who is 'neurodivergent' has a brain that functions in ways that diverge significantly from the dominant societal standards of 'normal' (Walker, 2014). Silberman (2016) argues for autism to be recognised as a form of neurodivergence; characterised by difference not deficit. The autistic rights movement supports the recognition of autism as a form of neurodivergence. There are controversies and differing ideas about how autism should be conceptualised (Baron-Cohen, 2019). Milton (2019) argues that differing opinions must not prevent 'interactional expertise' being developed where autistic people can lead and co-produce on meaningful research.

masking is one response to autism-related stigma (Cook, Hull, Cage & Mandy, 2021; Perry, Mandy, Hull, Cage, & Holloway, 2021). Autistic people have explained masking as a search for acceptance from others (Cage et al., 2018), which may also be driven by shame and self-criticism (Cage & Troxell-Whitman, 2019). Masking can be driven by a sense, often based on negative past experiences, that friendships and connections with non-autistic others must be made 'on neurotypical terms' (Hull et al., 2017; Pearson, Rees et al., 2021).

Existing research has begun investigating the mental health consequences of masking. Autistic people who mask more also report higher levels of anxiety (Cage & Troxell-Whitman, 2019; Hull, Levy et al., 2021; Livingston, Shah, & Happé, 2019), and some studies have also found an association between masking and depression (Cage et al., 2018; Hull, Levy et al., 2021). Although these findings strongly suggest there is a correlation between masking and mental health difficulties, the direction of causality cannot yet be inferred (Cook, Hull, Crane & Mandy, 2021).

In qualitative studies, autistic people describe fears of being bullied, victimised, ostracised or rejected as driving the need to mask (Bargiela et al., 2016; Cage & Troxell-Whitman, 2019; Hull et al., 2017; Livingstone, Shah, & Happé, 2019), as well as anxieties about appearing different, not fitting in or making 'social errors' (Bargiela et al., 2016; Cage & Troxell-Whitman, 2019; Hull et al., 2017; Tierney et al., 2016). Masking itself has been described as stressful and anxiety provoking, particularly in relation to fears relating to being 'found out' or 'getting it wrong' (Bargiela et al., 2016; Hull et al., 2017). The association between masking and mental health may therefore not be unidirectional, as mental health issues may drive masking and be present during masking experiences.

Masking is described as mentally, physically and emotionally draining, and burnout and exhaustion have been identified as both short and long-term consequences (Bargiela et al., 2016; Hull et al., 2017; Tierney et al., 2016; Livingstone, Shah, & Happe, 2019; Cage et al., 2018). Of serious concern is that masking has also been identified as a predictor of suicidality in autistic adults (Cassidy, Bradley, Shaw, & Baron-Cohen, 2018). Autistic people have described masking having a negative impact on self-esteem due to perceived social failings and ineffective masking (Livingston, Shah & Happe, 2019). Masking can also lead to a sense of identity confusion relating to a loss of 'authentic self' (Bargiela et al., 2016; Hull et al., 2017; Tierney et al., 2016), and a disconnection from other people (Hull et al., 2017; Livingston, Shah and Happe, 2019).

One limitation of the current masking literature is its focus on adults, with few studies conducted with autistic young people (Cook, Hull, Crane & Mandy, 2021). One previous study has explored the experience of masking in autistic and non-autistic young people qualitatively and quantitatively (Bernardin, Mason, Lewis, & Kanne, 2021). This study identified similar reasons for masking as reported by adults, including avoiding negative perceptions by others, and to feel accepted by other people. Consequences of masking included negative emotions and feeling tired, although mental health problems were not explicitly asked about or reported in results. This study suggests that further exploration of the relationship between masking and mental health in autistic young people would be beneficial, as research in adults has suggested many (correlational) associations. No previous research has focused specifically on the relationship between masking and mental health for autistic children and young people. It is therefore important to gather qualitative information to determine whether the associations reported in adult samples also apply in younger populations.

A challenge of investigating masking in teenagers, while they are still navigating the developmental stage of adolescence, will be making sense of how autistic masking may occur within or alongside typical adolescent social identity processes. It is essential to hear autistic teenagers' narratives and lived experiences of the process to understand what may be unique about masking during adolescence and in adolescent social contexts. This is particularly important as existing qualitative research has indicated that adolescent experiences and contexts, such as bullying, school transitions and increasing neurotypical social pressures and expectations, are involved in the development of autistic masking which continues into adulthood (Hull et al., 2017; Tierney et al., 2016). Autistic adults also report 'habit' (Cage & Troxell-Whitman, 2019) as a reason for camouflaging, which related to being taught or conditioned to see social differences as being 'bad' as a child. It is important to understand this from the perspective of autistic young people.

The present study takes a qualitative approach to investigating the relationship between autistic teenagers' experiences of masking and their mental health, to generate a richer understanding of the mechanisms that may underlie a relationship between two phenomena. Autistic teenagers' social experiences will be explored to elicit descriptions of how masking and mental health influence one another.

The key research questions were:

- 1. How do autistic teenagers describe their experiences of masking?
- 2. How do autistic teenagers describe the relationship between their experiences of masking and mental health?

2. Materials and methods

Ethical approval for this study was obtained from the NHS Health Research Authority and the Bloomsbury Research Ethics Committee (Reference 17/LO/2055).

3. Participants

Eligibility criteria: Autistic teenagers (age = 13-19) who had received a diagnosis of Autism Spectrum Disorder (including Autism, Asperger's Syndrome, High Functioning Autism, Pervasive Developmental Disorder) from an appropriate professional, and had IQ of 70 or above, were eligible to take part in the study. Autism diagnosis was confirmed via manual checking of health records, and IQ was measured directly as part of the broader research project from which these participants were recruited.

Participants were initially recruited for another study (reported on in Hull et al., 2021b). Families were contacted for the original

study via healthcare services, voluntary sector organisations, and social media. Participants from the original study, who had indicated they were happy to be re-contacted, were emailed with information about the current study. Thirty-five families were emailed an invitation to take part, and 27 responded. Out of these 27 families who initially responded, five did not respond to follow up emails, one dropped out prior to the interview due to mental health reasons and one was turned down when the sample size needed for males was reached. Our target sample was 10 males and 10 females as we wished to represent a balance of perspectives, rather than seek a representative sample of the autistic population.

Twenty autistic teenagers (age range = 13-19, mean = 15 years old) living in multiple regions across England participated in this study. Ten participants identified as male and ten identified as female. Twelve attended a specialist school or college for autistic young people, seven attended a mainstream school or college and one was home-educated.

4. Procedure

Seventeen out of twenty of the interviews took place face to face in the participants home, one took place face to face at a university research lab and two took place over a video call. All interviews were digitally recorded and lasted an average of 45 min (range: 17–73 min).

Teenagers and their parents were sent separate information sheets in advance, were given opportunities to ask questions and signed individual consent forms. Teenagers were reminded of their right to withdraw at any time. A visual stop and pause prompt was placed on the table, giving teenagers the option to indicate visually, rather than verbally, that they would like to stop the interview if necessary. Gender pronouns (e.g. he / she / they) and preferred language regarding autism (e.g. autistic person / person with autism) were also confirmed and used accordingly throughout the interview.

Following each interview, a short debrief took place with the teenager, and where appropriate their parent, to discuss the research topic, the teenager's experience of the interview and signposting for further support where necessary.

The semi-structured interview schedule (see Supplementary Material) was developed in consultation with all authors, and drawing on best practice guidance (Barker, Pistrang, & Elliott, 2016). It was guided by existing research into the conceptualisation of masking and its relationship with mental health (Hull et al., 2019), although care was taken not to assume that teenagers' experiences of masking would mirror adults' experiences.

The interview schedule included questions about social experiences and presented an opportunity for participants to spontaneously speak about masking without being directly asked about the pre-defined concept. Later in the interview, masking was asked about directly, using a range of descriptions from the existing literature. Participants were asked about the cognitive, physical, emotional and behavioural experience of masking, their mental health experiences and about the relationship between masking and their mental health experiences.

The interview schedule was piloted in the early interviews, refined accordingly and used in all subsequent interviews. From this process, questions were added about how experiences of diagnosis impacted experiences of masking and mental health. Clarifying questions were also added about the differences between social experiences with autistic and non-autistic others. Finally, follow up questions were added to ask about social messages participants had been influenced by from wider society and their social environment.

5. Qualitative data analysis

Interviews were transcribed verbatim and anonymised. Transcripts were analysed using a reflexive Thematic Analysis approach, to identify, analyse and report themes within the data (Braun & Clarke, 2006, 2019). Researchers were keen to recruit, in qualitative research terms, a relatively large sample in order to hear from both males and female participants across the span of adolescence. Thematic analysis was identified as a systematic and flexible method which would allow researchers to analyse a large amount of data. As the research topic is in its infancy, an inductive, data-driven approach was chosen, in order to capture participants experiences and how they have made sense of them, and to generate hypotheses about causality which could be tested in the future. During the process of analysis, the researchers took a critical realist approach (Willig, 1999), to allow for consideration of how the broader social context was impacting upon the participant's experiences and the meanings they were making.

The twenty transcripts were read through in full by the first author prior to starting coding and initial ideas for coding were noted. Initial codes were then generated for the entire dataset, and these codes were then sorted into potential themes, each representing unique patterns of shared meaning (Braun & Clarke, 2019). These initial themes were discussed and refined with the other authors, particularly considering internal homogeneity and external heterogeneity (Patton, 1990). The first author then returned to the data, firstly the coded extracts and then the entire data set, to review and rework the themes, before the final themes and subthemes were defined and named. Finally, the analysis was written up, with contributions from all four authors, using extracts from the data to support each theme.

A consensus approach was used throughout to strengthen the credibility of the findings. The first author met with the other researchers multiple times during the analysis process, to share early iterations of the thematic map and to discuss different ways of grouping and presenting the themes. The third author also read and coded excerpts of interviews. Differences in coding, interpretation of themes, and selection of quotes were discussed until a consensus was reached across all four authors. The research team includes neurodivergent and neurotypical members, who have a range of experience including academic and non-academic researchers, and clinical psychologists.

6. Results

The analysis generated seven themes. All themes and subthemes are listed in Table 1. The theme 'Keeping it Inside' describes how masking was conceptualised by participants and 'Being Myself' describes participants' experiences of not masking and, instead, feeling more authentic. We note here that we use the term 'autistic authenticity' to mean situations in which people are not masking; however we do not wish to imply that masking necessarily means inauthenticity. Instead, we use 'authenticity' to mean feeling accepted and able to be one's (autistic) self, in contrast to needing to mask. We hope that a more appropriate term can be identified in future research in collaboration with the autistic community.

All subsequent themes represent other factors involved in the relationships between masking, authenticity, and mental health. 'How others treat me' describes the participants' past experiences, both positive and negative, of how other people have behaved towards them. Participants gave examples of these experiences directly driving, or preventing, the need to mask. They also gave examples of how these experiences indirectly drove masking through their impact on their 'self-image' and 'internal experiences' such as anxiety. Participants also described how the 'Immediate environmental context' contained triggers for masking, often through anxiety or sensory overload. Finally, participants described the 'self-fulfilling prophecy' of masking and authenticity leading to further mental health issues.

6.1. Theme 1: Keeping it inside

Consistent across participants was the experience of keeping things hidden from other people. Descriptions of masking differed both between participants and within each participant's experiences.

Some participants identified just a few examples of conscious self-suppression, for instance holding in 'unrelated' or 'inappropriate' thoughts, stopping habits that annoy others or "times I have to mildly rein it in" (Participant 3). Others gave detailed accounts of masking in various ways and across various contexts. Some participants gave examples of hiding or suppressing parts of themselves or their experience, particularly aspects seen as 'different' or related to being autistic. For instance, participants described suppressing and hiding emotions, sensations, stims, reactions, opinions, or interests. Participants described 'putting on an act' in order to appear more 'normal', for instance forcing themselves to make eye contact, having a character or persona, monitoring and adjusting voice and mannerisms, and rehearsing what to say.

However, for many of these interviewees it appeared that strategies were the surface level presentation of a much deeper, and at least partially subconscious, experience. Participants described how masking was often 'not particularly tangible' (Participant 10) as it had been part of their experience of and interactions with the world for as long as they could remember. Masking was not limited to suppressing one's autistic self; it involved the suppression of a whole range of sensory and emotional reactions:

"I mean, every single time something distressing is told to me, I'm like, I do masking. I'm like, I need to try to hold this reaction back. but this is easier said than done." (Participant 18)

Several of the young people who described experiences of bullying, disparagement and ostracism found it difficult and anxiety provoking to discuss masking. Although it was not discussed directly in the interviews, there was a strong sense that past experiences had been so distressing, and potentially traumatic, that masking was a conditioned response driven by need and safety. It was therefore difficult to reflect upon masking or unmasking, due to high levels of shame relating to unmasking or 'being myself':

Table 1
List of themes and subthemes.

| Theme | Subtheme |
|---------------------------------------|--|
| Keeping it inside | |
| 2. Being myself | |
| 3. How others treat me | Responses to social differences |
| | Bullying, ostracism and victimisation |
| 4. Self-Image | |
| 5. Immediate environmental context | Familiarity of context |
| | Characteristics of people |
| | Specific and physical environments |
| | Intersecting identities |
| 6. Internal experiences drive masking | Anxiety and worry |
| | Depression and low mood |
| | Sensory and cognitive overload |
| 7. A self-fulfilling prophecy | Anxiety |
| | Mood |
| | Self-Image |
| | Connection |
| | Exhaustion |
| | Sensory and cognitive overload |
| | Suicidality |
| | Protection from bullying and ostracism |

"They seem trusting but then when you talk to them they're like 'you should have kept that inside your head'. They don't understand you in general. They have opinions about you going to college. I just want to live my life as a normal girl. I want to go to college. I fucking hate talking about my autism. Everyday just feels like a battle and I just wish autism could be taken off my records already... I thought if it got taken off my record then I wouldn't have to talk about it again. That's what's hard... that I just want to live my life as a normal person... I wish there was a cure." (Participant 11)

6.2. Theme 2: being myself

All participants described experiences of feeling or knowing that they were not masking, and instead feeling able to be themselves. One participant did not describe any experiences of masking and several other participants felt that overall, they did not relate to a sense of ', 'masking' or 'putting on an act'. One participant explained:

"I don't need to. I just act how I act...Really, I don't really hide it. I mean, I don't even know what the symptoms are, I can't remember the symptoms of autism but I don't really care now." (Participant 2)

Participants who related more strongly to the idea of masking were also all able to identify at least one context when "I don't have to act" (Participant 7).

'Authenticity' as a term was not used by participants, however it was conceptualised post-hoc to encompass the range of descriptions participants gave of times they were not masking. Participants conceptualised these experiences in various ways including: "I'm totally myself" (Participant 8), "I'm putting on less of an act" (Participant 10), "I can just have a good time and be myself... I don't have to pretend to be someone else" (Participant 12), and "I kind of become more of myself" (Participant 15)". Participants gave specific examples of not needing to mask, and feeling authentic or most 'myself':

"Have actually interesting conversations with people as opposed to just sticking to football... [or] something that I think the other person might enjoy." (Participant 1)

"With text, with writing, I don't have to spend all that energy on my facial expressions, so I can just put it into writing. And that can actually make it easier to talk about some more difficult conversations like mental health" (Participant 10)

"I kind of become more of myself...I can make a joke [or] start talking about something I like." (Participant 15)

One participant also expressed some difficulty in knowing what authenticity or 'being myself' would feel like.

6.3. Theme 3: how others treat me

Many participants described how masking developed as a response to other people's behaviour towards them, including how others have responded to their social differences. Participants described how experiences of other people valuing, supporting and accepting their social differences reduced or prevented the need to mask in certain contexts.

In some instances, participants made direct links between the influence of past social experience on the development of masking or authenticity:

"Because I'd spent so much of my life not fitting in and being ostracised. I thought that [masking] was the only way to be liked." (Participant 17)

"They weren't like the popular group. So they kind of, they were more accepting so I could be myself." (Participant 20)

In other examples, social experiences were described as indirectly influencing the development of masking or authenticity via their emotional impact, for instance on mood, anxiety or self-image:

"I remember when I was in like year seven, I used to get like bullied a lot. I was pretty nervous when I first joined [Saturday club] I was worried in case like people would make fun of my autism. I didn't even tell anyone I had autism... I never told anyone about my autism there". (Participant 15)

"I couldn't quite be my, fully myself around everyone [but now] I'm totally myself. People say at my new school how positive I am and it's nice to be around. Whereas at my old school it's always oh I'm so moody and all miserable. So it's nice to get that recognition that I'm being positive cos I don't realise it. It's just because people are lovely, I'm just at home. I think it's just they're more caring". (Participant 8)

6.3.1. Theme 3.1: responses to social differences

This subtheme details how teenagers described developing masking as a gradual response to multiple criticisms and discouragements from others over time. Specific experiences were shared of times when teenager's social differences were criticised by important people in their lives:

"I've realised like why kids never used to like me, because my social skills weren't good enough. But now that they've got better so hopefully no one will criticise me on them because I've had teachers at school criticise me on them. And I go to a special needs

school, where they should really be encouraging me... I used to be told a lot to keep things inside my head. It's been very hard for me." (Participant 11)

"People have this expectation that we have to look each other in the eyes. And if you don't, you're shady or you're lying or you're a bit dodge. So I trained myself to look here... so many times I've had teachers [say] look me in the eye when I'm talking to you, look me in the eye when I'm talking to you." (Participant 17)

When asked about past experiences that had influenced the development of masking, teenagers identified experiences of negative reactions or criticism from strangers:

"So we were sitting waiting for the [exhibition] and I'm, this was when I was very young, so I didn't know how to mask yet. So I got up and started flapping. And then a woman behind me was trying to see and said 'sit down little girl'... and then when we were walking out, we saw on the guest book there was a guest in the guest book there was a message from the woman saying, good, but that little girl should have sat down." (Participant 18)

Teenagers also identified how unhelpful narratives about autism, from individuals and from wider society, also played a role in the development of masking. Participants felt that other's misconceptions or prejudices impact the parts of themselves they are able to share with others in social situations. These misconceptions included compliments for appearing non-autistic, pity when disclosing autism, and holding prejudiced views:

"There's one person who knows, because I told her when I first found out. And she was like, the first thing she said she was like, 'Really, you don't look autistic'? And I was like, okay! Sure. So then since then I just haven't bothered explaining." (Participant 20)

When asked about specific people they were more likely to mask around, participants gave examples of times people had shown ignorance or prejudices about autism, and how these incidents increased their frustration, discomfort and anxiety in social situations more generally, and reduced ease in being themselves, particularly with strangers:

"[It's harder to be myself around] people who don't agree with the obvious facts, like the earth being round. and vaccines not causing autism. And if they did, we'd be in a far better world because it would mean people wouldn't be as dumb as them. I just don't get it. Like I swear, people who are anti-vax. Why would we fake it? Why would we make it cause autism? What's the purpose?" (Participant 6)

For one participant, their experience of being made to feel 'alien' during the autism assessment process played a role in the development of masking:

"I had spent the last 2, 3 years of my life being stared at, being assessed, being looked like a guinea pig, not poked and prodded at, but like. Everyone writing on clipboards, asking me questions, asking my mum questions as if I was this alien from outer space... And as I said, although it was a relief [to receive the diagnosis], I was just like, OK, so now I definitely know that I'm not normal. Let's try and hide that." (Participant 17)

Many participants also described times when their differences were valued, accepted and supported by other people, and felt these experiences had either prevented or limited the development of masking, or created contexts where masking was not necessary. Participants gave examples of the kinds of overtly positive messages they had received from friends, family and school who valued, for instance, their honesty, non-conformity, skills, kindness, and abilities:

"A lot of people in my life do specify that it's okay to be me. [brother] is very supportive of me and he doesn't really falter in his faith in me. So like he's very confident in my own abilities and sometimes more so than I am of my own". (Participant 3)

"[School] would say, don't care, just don't change yourself. Like you don't have to act." (Participant 12)

Participants also described more subtle things other people do which communicate that their differences are accepted:

"[My friends aren't] trying to like make me keep eye contact. I really hate that... people in my friendship group know that I that I don't like keeping eye contact. And that if there's a lull in the conversation, then I might just like blurt out something." (Participant 20)

Participants also valued times when they had explicitly been included, supported in a social situation, or when someone stood up for them to someone else. These experiences helped teenagers feel more confident to honestly express what they were feeling.

6.3.2. Theme 3.2: bullying, ostracism and victimisation

Some participants described masking as a response to experiences of bullying, ostracism and victimization, as identified in this subtheme. Participants spoke about experiences of bullying in mainstream school, before having to move on to another school. These experiences were described as frightening, overwhelming and having a big impact on their mental health. Participants spoke about developing a mask to protect themselves from further victimisation:

"Trying to shield myself from more stuff. Just becoming a human cactus at this point, protecting their heart inside." (Participant 7)

"[I mask because] I've always been picked on because I'm autistic. Whether people knew that or they didn't it doesn't matter. It's the fact that I am different." (Participant 17)

Participants reported that through repeated bullying and ostracism, masking developed as a way to find acceptance from their peers. However, when the bullying did not stop, some participants instead took on the responsibility of educating their peers about autism:

"I noticed when I was there, a lot of the people made fun of the fact that I came from [specialist autism school] because they recognised the tie colour or the jumper. But when I was, when I walked past some girls and I was like oh... don't worry we're not as bad as you think we are. And then erm, soon we got up a conversation, and I talked about like how good autism can be and that, how it's, how it's all right and not too bad and that." (Participant 15)

One participant shared how masking is also impacted by her fears relating to her knowledge of systemic injustices towards autistic people, for instance, the treatment of autistic people sectioned under the Mental Health Act. Suppressing emotional or sensory expressions were therefore also a way to avoid potential harmful mental health interventions.

6.4. Theme 4: self image

Participants described feelings of shame, inferiority and low self-confidence, often stemming from the experiences described in theme one, and how these feelings and images influenced the development of masking.

Participants spoke about feeling ashamed of their past social skills, behaviour or expression of distress. For instance, participants described times when their sensory reactions to an environment, a period of high energy or hyperactivity, or strong emotional expression had caused them to feel guilty for the impact on someone close to them, or ashamed of their behaviour. A negative self-image drove and reinforced masking:

"So it, maybe the anger would come to sort of at home with family rather than at the people at school...I think it would bring everyone else down. I know it's about me, but I like. And then when I see them upset, it makes me upset. Cos I've caused it, and then I'm feeling even more low." (Participant 8)

"I don't really like talking about what they [my social skills] were like at the time because it's really embarrassing because. Because I used to board and partly why I left boarding is because the care team kept talking to me about what I used to be like. And, I kept saying, please could you stop talking about what I used to be like? I'm really ashamed of the person I used to be... Like because I'm not the idiot I was then. Like I never thought about anything' (Participant 11).

Some participants directly compared themselves to neurotypical peers, presenting themselves as inferior. Autism acceptance was also discussed; low personal autism acceptance and low perceived autism acceptance from society impacted on self-image and the development of masking. Participants indicated that their mask(s) developed as a response to the narrative that a neurotypical style of communication was superior and most desirable. Some descriptions illustrated how the negative self-image they held, from these narratives, directly drove masking:

"I'm quite awkward I suppose now in comparison to other people like sort of neurotypicals especially. They can just communicate better I suppose. They just sort of have the most natural vibe, everyone listens to them and don't sort of mess up when speaking or anything... I just really want to try hard. And since the awkwardness radiating off me so it isn't quite working as well... I gesture a bit more. And ramble on because I'm trying to keep the attention on me". (Participant 7)

On the other hand, some participants described feelings of pride and self-confidence, which were rooted in or reinforced by positive responses and messages from others. Some teenagers reported placing very little importance on other people's opinions of them and, for instance, did not feel impacted by peer pressure or a need to fit in. Some shared strong convictions about acceptance between autistic and non-autistic people needing to work both ways and illustrated in their descriptions how a positive self-image and a positive narrative of being autistic directly reduced or prevented the need for masking:

"I feel like if I got myself into a scenario in life where I have to completely redefine myself, just to fit the scene, I'm questioning if I want to be a part of that scene, because I feel like if I need to accept them a bit, they need to accept me a bit... it's just come from this like sense that if I have to accept neurotypicals' way of thinking, then why can't they accept mine? So like, if you want me to rein it in mostly, sure, that's perfectly fine. But if you want me to be a different person for like seven to eight hours of the day, then you're asking for something that I'm not in the mood to give you. In some ways autism makes me more capable than normal people" (Participant 3)

Some participants also spoke about valuing their personal strengths, which related to being autistic; teenagers expressed pride in their intelligence, specific skills or abilities, self-awareness, creativity and ability to be a good friend.

'Because I feel like autism in my case is better than being normal... I wouldn't want to be normal. I wouldn't be as smart and want to do as much learning as I am. I wouldn't have my amazing memory" (Participant 6).

Some participants experienced a conflict between valuing and wanting to be themselves, and wanting to feel comfortable, but equally wanting to fit in, connect, and be respected or admired. Teenagers reported that when they were able to unmask, or feel accepted for their authentic self, both desires felt simultaneously possible:

'I'm just a free person in the civilized world and I can lie down whenever I want. In my mind, anyway... I feel different but at the same time I feel like I want to fit in... I just want to be with others. But I don't want to change myself fundamentally" (Participant 18)

Teenagers also spoke about how receiving their autism diagnosis shifted their self-image, which impacted on their masking. By becoming aware of their social differences, they developed more self-compassion and respect and reduced masking; for instance, no longer pushing themselves to do the things they previously felt they *should* want to do:

"If I'm nervous about like going to school or something and I've learnt not to force myself to try and be in situations which I know I won't like. I used to want to be invited to parties and things but now I know that I just, it's really not for me. So that's definitely helped" (Participant 20)

6.5. Theme 5: immediate environmental context

Participants described masking as contextually driven. The nature and familiarity of the context and characteristics of the people present were triggers for masking. Sometimes the environmental context was a direct trigger for the development of masking:

"Especially in a new situation, I'm very aware of having to like pull back on it, not be myself in that sense, but yeah. It's more obvious for people when I'm when they're around me 24/7" (Participant 8).

However often the context triggered emotional and sensory experiences which in turn drove masking or authenticity:

"Like if I just have to spontaneously go out to get a haircut. It's ok when I'm doing it [masking] because I focus all of my energy on doing it. It's usually the period before that's the most worrisome. It's just looking like something's wrong with me perhaps. But it's also just feeling anxious I think, that's the problem, sometimes you can't really put a finger on it" (Participant 10).

6.5.1. Theme 5.1: familiarity of context

Many participants described unfamiliar situations as a trigger for masking, and often related this to higher levels of anxiety and lower self-confidence associated with these unknown contexts. Teenagers felt that they were able to unmask and feel more authentic in familiar situations where they were more relaxed and comfortable:

"If it's something where I'm going every day, school particularly, it gets easier. So lessons are better. I don't have to worry about that kind of stuff at school. Occasionally it comes back though usually if I'm talking about something new. If it's something rehearsed like public speaking it's actually not that bad because it's rehearsed. That's why because I've done drama before and I don't really have a problem with projection because it's a rehearsed idea" (Participant 10).

On the other hand, for some participants, masking became impossible in the most emotionally overwhelming unfamiliar contexts:

"Well, if I'm really sad I wouldn't have come in the first place. Because I can mask that in school but I can't mask that in an actual [new situation]. Because I know about school, I know what lessons I have, know the teachers I have, so I know I can pretend to be okay in those lessons. Whereas in that social group I didn't know who was going to be there so something could trigger me and I could cry" (Participant 12)

6.5.2. Theme 5.2: characteristics of other people

Participants identified people who they were either more or less likely to mask in the presence of. Most commonly, participants felt more authentic in their interactions with other autistic people, people they knew well, particularly close friends and family members, people who knew they were autistic and people who they shared interests with or felt similar to. This related to feeling less anxious and more relaxed in the company of these people. More spontaneous and less structured interactions felt easier with close friends and family:

"And church... there's a few kids who have an autism diagnosis. I get on so well with them... It's just this circle of complete and utter transparency and honesty, and it makes my life so much easier" (Participant 17)

"And they will be more understanding but also it's just because I think there's also something a bit because of, the same sort of ethereal sense of being different is less so you're less on guard so you're less managing your expressions, your voice, your actions" (Participant 10).

On the contrary participants reported feeling more anxious and tense, and masking most commonly with neurotypical people, strangers, and people who didn't know they were autistic. Some participants reported masking most commonly with neurotypical people their own age:

"Yeah if I meet any new people I think it's safer just to mask because otherwise I would seem insane. So it's when I meet new people and when I meet people who are like, you know, the typical neurotypicals, the popular people in my school, I'll mask then" (Participants 20).

6.5.3. Theme 5.3: environmental characteristics

Several participants often described their masking as contextual; they noted how it was elicited by specific places or situations. Teenagers noticed that they masked more in busy public places, where their anxiety was higher, and they experienced specific fears that other people would respond negatively to them or make negative judgements:

"Mostly I feel like I need to mask it when I'm in a public place. And like when there's loads of crushing people I'm like, oh, I really want to run but I can't run because I wouldn't flap because people are obviously going to stare at me and think, oh, what's that girl doing running and flapping" (Participant 18)

Some participants had noticed an increase in masking after they started in a mainstream secondary school. In addition to experiences of bullying and ostracism described in theme one, masking developed through increased anxiety and feelings of difference, in the context of large numbers of neurotypical peers and sensory overstimulation:

"I guess it was just of kind of being around everyone else, sort of going from a little school into a big school and seeing how everyone else was acting and kind of like feeling that maybe I don't do the same things. I don't walk the same way" (Participant 4).

Environments which supported participants to pursue their interests, passions or strengths also supported them to be themselves and reduced the pressures to mask:

"I'm still myself... I'm more relaxed in my environment, so it's, erm, and I'm more comfortable as well, and I feel more, it's my, my second home, if you'd like... I'm doing art stuff I love, and they've got amazing facilities. So I'm really happy and positive about all of it" (Participant 8).

6.5.4. Theme 5.4: intersecting identities

Teenagers also alluded to ways in which being autistic intersected with other aspects of their identity in specific contexts, driving masking. Masking became more necessary in environments when other people's norms, expectations or prejudices relating to gender and class were activated:

"I remember trying to act calm or normal in a posh, rich area... so like imagine this everyday person, you know, you see them on the street. Now imagine them in a restaurant. A rich one. Just like being awkward. With the handkerchief on his lap" (Participant 2).

"Well, from, I joined my prep school in year four and I played with the boys most of the time up until about year six, because that was just more fun, they were like, the girls' conversations were just really boring. But then in year seven, they started like not hanging around with me as much, so then I had, I wanted to go and try and be popular with the girls'. (Participant 20)

6.6. Theme 6: Internal experiences drive masking

Participants described how their mental health, and broader internal emotional and sensory experiences, were involved in the development of masking. Participants described some of the thoughts, feelings, and physical sensations involved in the development of and experience of masking, often relating to negative past experiences, negative self-image and social environmental factors (explored in themes 2–4).

6.6.1. Theme 6.1: anxiety and worry

Participants described how anxiety contributed to the development of masking. Teenagers named specific fears relating to coming across as rude or 'weird', or doing something 'wrong', and noticed feeling tense and nervous in these situations. Some participants also described worrying about others noticing they were anxious or upset and developing an 'emotional mask' to hide feelings of anxiety or distress:

"Yeah it's just looking like something's wrong with me perhaps. But it's also just feeling anxious I think, that's the problem, sometimes you can't really put a finger on it. I was always analysing people's behaviours and facial expressions quite a lot, usually to determine whether I was doing something wrong myself. So I often got quite an anxiety about that and still do. I don't know it's not particularly tangible, but you're just worried people are going to notice you're feeling anxious... it can get quite intrusive". (Participant 10)

"I felt really awkward. I just sat there eating my chewing gum being like 'well I'm going to try and be cool', I have chewing gum and have my Starbucks. Try and be cool and just be like I don't care, but I do, I'm freaking out inside" (Participant 12)

Other participants described specific fears of other people making fun of them or criticising them. This was often based on past experiences from which masking had developed alongside considerable anxiety, for instance about whether masking will prevent further criticism:

'Yeah, I think she apologized, but I'm still a bit nervous now as to what she still thinks of me going to college. And I really want to know what she thinks now, if she's changed because I've tried to work on everything and now I can have a proper conversation without being criticised for something'. (Participant 11)

Additionally, many participants described feeling relaxed and comfortable in the contexts where they were less likely to mask:

"At school. I mean even when we're just sat in form at tutor time and we all have all laughs and we all feel like happy and everyone's happy, and we're all like connected and happy. Because we all know each other in the class and we all have to deal with each other in the class". (Participant 12)

6.6.2. Theme 6.2: depression and low mood

Some participants spoke of the influence of depression or low mood on the development of masking. For some, masking was motivated by a desire to hide their low mood from others. Participants described how long-term experiences of bullying and ostracism, alongside being distressing, led to experiences of depression and low mood, which contributed to the development of masking. For one participant the drawn-out experience of struggling to obtain a diagnosis of autism also played a role in the development of depression then masking:

"When I was undiagnosed you feel very alone because obviously you think you're neurotypical, and everyone else thinks you're neurotypical, so they expect you to act like you're neurotypical. And I thought I was, but obviously I was not. Like, definitely was not. So I was very much ostracized by my classmates. My teachers didn't know what to do with me. My parents didn't know what to do with me. I was very much inert in my own life. [...] I felt so relieved afterwards to know that there was a reason for why I was a little bit different. But then at the same time, I had a bit of an identity crisis. And for two years did my absolute best to hide it from my classmates (Participant 17)

6.6.3. Theme 6.3: sensory and cognitive overload

Several participants described overwhelming experiences of sensory sensitivities and cognitive overload, particularly when coping with the demands of the environments described in theme three. They described how masking could be highly physically uncomfortable and an additional mental and sensory demand. Specific aspects of masking, for instance forcing oneself to make eye contact, were described as physically painful, and became harder when participants were already dealing with sensory and cognitive demands:

"I always have everything I've ever done or said, what's going on right now, everything that's going in my head, I'm thinking at the same time I'm talking to you... All this stuff is because of my brain and because of my emotions and my reactions and everything that makes my head hurt... [Masking] does add to it. I mean, I already have a dozen things to think about, I don't need like one to two more" (Participant 18)

6.7. Theme 7: a self-fulfilling prophecy

Masking had many consequences for participants; some were direct consequences to the teenager's mental health, and some were closely related to their mental health.

6.7.1. Theme 7.1: anxiety

As described above, many participants described experiencing anxiety prior to and whilst masking. Participants also described how anxiety was maintained in the longer term through masking. Suppressing emotions, stimming, and responses to stressors were noted to maintain anxiety. Masking across multiple contexts had a cumulative effect on anxiety and its impact on the young people's lives:

"You're worried that people will think you're anxious, so you try not to be anxious, but you just get more anxious. It's a self-fulfilling prophecy in a way" (Participant 10)

Participants also explained how in situations where they felt more able to be their authentic selves, they experienced reduced anxiety and increased confidence. Anxiety was particularly reduced through the authenticity experienced in the company of other autistic people:

"It makes me feel less anxious. It does, it increases your self-esteem. It makes you have more energy because you're not spending so much on putting on an act". (Participant 10)

6.7.2. Theme 7.2: mood

Participants also described how masking lowered their mood and made them feel sad about being unable to be themselves and being disconnected or different to others. For some this led to feelings of hopelessness about the future, particularly when masking did not prevent future occurrences of bullying and ostracism:

'[After masking] I just go into my own world really I get a bit sad I don't know why' (Participant 8)

Participants identified how their mood became more positive in situations where their authentic selves came through:

"It gets my spirit a bit up... randomly sing and dance. it's kind of more like a way to be sane". (Participant 2)

6.7.3. Theme 7.3 self-image

Another consequence of masking was the long-term impact on self-esteem and self-image, whereby masking reinforces feelings of difference, shame and low self-confidence. Certain participants specifically noted how masking negatively impacted their self-image:

"I guess it can make me feel a bit annoyed sometimes. I can feel a bit like 'I'm not normal', 'I'm having to, I'm having to kind of watch this'. I can feel a bit annoyed afterwards. I guess I can feel a bit sad as well for the same reason" (Participant 4)

Some teenagers also found that situations where they were not masking, and others responded positively, had a positive impact on their self-image:

"When I finally told people and they were all so, so great about it. That really impacted me positively. I mean society's all like 'be yourself... but not like that'. When I was myself, and even though society would say 'not like that', everyone else was like, 'yes, like that!', it was great. It was very it was very powerful' (Participant 17)

6.7.4. Theme 7.4 connection

Participants described how masking increased their feelings of disconnection from other people, which negatively impacted their mental health. These participants described masking as a lonely experience. By hiding their emotions, identities and authentic selves, teenagers felt as though there was a barrier between themselves and other people:

"It's like you're very close to someone, but very far at the same time, so you can know someone's behaviours and such and you can analyse them because... I was always analyzing people's behaviours and facial expressions quite a lot, usually to determine whether I was doing something wrong myself. So I often got quite an anxiety about that and still do. But at the same time, you feel like you're always on sort of a different level somewhat" (Participant 20).

Teenagers emphasised that they felt most connected to others during times when they were not masking and felt most authentic:

"[I feel most connected] when I don't have to like, act, and we can just talk about similar things, or, we can both, like, give pets cuddles, and sort of nice stuff like that" (Participant 7).

6.7.5. Theme 7.5: exhaustion

Several participants described masking as a demanding and draining experience, which took its toll on their mental wellbeing. Teenagers described how masking took up a lot of energy, physically, mentally and emotionally:

"Going outside for something that's not rehearsed can take energy. Like if I just have to spontaneously go out to get a haircut, which I did this week, can take energy to do that" (Participant 10)

'It's so tiring, trying to constantly be on the ball' (Participant 20)

Participants who described masking all day at school explained how the exhaustion impacted them on their return home. They described how everything 'came out' at home and how this impacted their interactions and relationships with their families, which in turn impacted on their self-image and mental health:

"It all came out. So like, all everything that built up from school it all just come out. And that'd make it worse at home. Kinda like angry and tearful and annoyed and shouting at my brother things like that" (Participant 8).

6.7.6. Theme 7.6: sensory and cognitive overload

Some participants identified stimming as essential for regulating emotions and sensory sensitivities, and explained how suppressing (i.e., masking) stimming took away an essential emotional regulation tool and mental health coping mechanism:

"When you're masking, you can't be yourself... you'll be in situations in which you have to deal with it as a neurotypical person would. So if you're in a loud situation, you can't block your ears or be distressed because then people will looking at me like 'what's she doing?'... it's that that will cause a meltdown because you you're getting all of this input and you can't filter it and it's horrible". (Participant 17).

On the other hand, times when these participants were able to express themselves freely, particularly through stimming, they described an immense emotional, sensory and cognitive release:

"Everything inside my brain, just vanishes for a second, and I just feel like I'm able to just process everything and all I think about really is the running. I don't care what happens. I just want to run run run run run... it all just vanishes, it all just melts away suddenly. Because I, all I really want in life is to be free" (Participant 18).

6.7.7. Theme 7.7: suicidality

One participant spoke about how the exhaustion and impact of masking took a profound toll on their mental health and how at

times this led to suicidal thoughts and feelings:

"For some people, it will be easier to not exist rather than to exist. There have been countless times in my life where I have felt that and it has taken me great courage to keep on existing" (Participant 17).

Another participant reflected on times when copying and mimicking others, while masking, made it difficult to distinguish their feelings and someone else's feelings. At times, this left them very vulnerable to harm:

"I made friends with this girl called [name]. And she was not the best influence because I was trying to copy people at that time so erm, she was quite depressed and quite, quite suicidal as well, and she would like self-harm and things. Yeah, we used to say like that we were one. And, yeah, we used to do everything together, including how we felt about things. I wasn't really sure what I personally believed in anymore" (Participant 20).

6.7.8. Theme 7.8: protection from bullying and ostracism

Participants described a final consequence of masking; to some extent the mask protected teenagers from further bullying or ostracism and from the severe emotional consequences of those experiences. Participants commented on the profound negative impact that bullying and ostracism had on their mental health and when masking helped them to avoid this, they experienced some relief and satisfaction:

"I'd come from such a bad place so to be in a place where I was accepted. And a place where I was liked even was just so good that it didn't matter to me that I was masking, that I was doing it falsely" (Participant 17)

"And I feel really satisfied when I'm going home because I'm like, wow, I impressed them today and they didn't find me weird, like" (Participant 19)

7. Discussion

The present study sought to understand autistic teenagers' experiences of masking as well as the relationship between masking and their mental health experiences. The findings give a broader conceptualisation of masking than currently exists in the literature. Most participants described experiences of both masking and, conversely, of autistic authenticity, with different developmental and consequential factors. Masking and authenticity seemed to be two potential (but not necessarily mutually exclusive) responses to being autistic in a mostly neurotypical world.

Results suggest that the relationship between mental health and masking is not necessarily linear. Autistic teenagers' negative past experiences of other people's behaviour and reactions to them, their own negative self-image and various environmental factors were all described as factors leading to the development of masking. These factors also contributed to high levels of anxiety in social situations, which in itself drove the development of masking. Experiences of masking and authenticity had further consequences for mental health, including for anxiety and mood, and related factors including self-image, connectedness, energy levels and sensory experiences.

Although various definitions have been proposed (Hull et al., 2017; Lai et al., 2017; Livingston et al., 2019; Pearson & Rose, 2021), within the literature, the conceptualisation of masking is in its infancy (Ai et al., 2022). To date, masking has been mostly limited in definition to conscious behavioural or cognitive strategies. The current findings point towards a broader understanding of masking as something multifaceted, emotionally and psychologically rooted, which develops partially subconsciously within a social-environmental context. Participants described masking less as a choice or decision, but more as an anxiety-driven response to others' behaviour and attitudes towards them, or to uncomfortable and inhospitable environments. This fits with some previous findings that masking involves subconscious components (Bargiela et al., 2016), and arguments that masking is a response to not being accepted by the neurotypical world (Pearson & Rose, 2021). Participants did not limit their descriptions to social strategies or the camouflaging of autistic traits; masking included the suppression of emotion, reactions, sensory sensitivities, opinions and other aspects of identity such as class and gender. This reflects a growing awareness of the intersecting impact of multiple stigmatised identities for many autistic people (Botha & Frost, 2018).

This study identified some similar themes to those reported in a previous mixed-methods study of masking in autistic and non-autistic young people (Bernardin et al., 2021), including the experience of negative emotions when masking, and feeling expectation to mask due to other people's reactions. However, the present study extended previous findings to identify specific characteristics of the environment and the individual which might contribute to the association between masking and mental health, as well as proposing for the first time that mental health problems, particularly anxiety, might motivate masking as well as being a consequence for autistic teenagers.

Participants' descriptions of anxiety as a driver of masking is in line with previous qualitative research into masking in adults. Hull et al. (2017) found motivations for masking included high anxiety in relation to staying safe, 'assimilating', and finding social acceptance. The current study also replicated previous findings that autistic people mask their anxiety, and other emotional reactions, in social situations, due to fears of the consequences of sharing their true feelings (Tierney et al., 2016).

The interviews highlighted that negative past experiences of how other people behave towards autistic teenagers impacts upon the development of both masking and mental health. Previous research has highlighted the negative impact of bullying and victimisation on autistic young people's mental health (Griffiths et al., 2019). Avoiding negative behaviours from others has previously been

identified as an external factor driving masking (Bargiela et al., 2016; Cage & Troxell-Whitman, 2019; Hull et al., 2017; Livingston et al., 2019). The current interviews also emphasised the range of behaviours and reactions from others, including bullying, ostracism, alienation, rejection, criticism, and ignorance, which can contribute to the development of masking both directly, and indirectly through their impact on mental health, particularly anxiety.

The current study also showed how when autistic teenagers receive messages from family, peers, school, and wider society that they are 'deficient' socially, this influences their self-image and self-esteem, and drives the development of masking. These findings fit with Milton (2012) 'double empathy problem' which states that autistic and neurotypical people may both experience difficulties in understanding one another's sociality due to differences in neurology and communication styles (Crompton & Ropar, 2020), however 'deficit-based' narratives of autism place the expectation to understand and adapt to the differences on autistic people only. The interviews in this study show how autistic teenagers can internalise the 'deficit' narrative and this can lead to the development of masking in order to shoulder the burden of double empathy problems in social situations.

Mandy (2019) suggested that an environment that is inhospitable towards autistic people could be another factor involved in the relationship between masking and mental health. Participants in the present study identified environmental factors that drove masking, both directly and indirectly through the anxiety and sensory distress caused. Previous research has captured autistic people's sense of themselves as a social (stigmatised) minority in the company of neurotypical friends and family and how this drove the need to conform to neurotypical expectations (Botha, Dibb, & Frost, 2020; Crompton, Hallett et al., 2020). Getting by in a 'neurotypical world' has been identified in previous research as a cause of masking (Cage & Troxell-Whitman, 2019). The current findings support this; participants reported that they masked the most in environments where social norms were most strongly held and enforced (i.e. mainstream secondary schools), they were therefore most expected to 'act neurotypical' and they were most likely to experience anxiety and sensory distress. This was especially the case in the company of neurotypical people and in environments 'built' for neurotypicals which were particularly sensorially overwhelming or unpredictable. This would fit with the social model of disability (Shakespeare, 2006), whereby the environment excludes and impairs the individual. Previous research has shown that non-autistic people can form immediate negative impressions of autistic people which can impact the way non-autistic people interact with autistic people (Sasson et al., 2017), supporting the observations of our participants that others treated them differently because of their autism.

Participants' descriptions of the mental health-related consequences of masking support a number of existing findings in the literature. Anxiety was involved in each stage of the process of masking; it was identified as a trigger, a description of the emotional experience of masking and a consequence. An association between masking and anxiety has been established in previous work (Cage & Troxell-Whitman, 2019; Hull et al., 2021; Livingston et al., 2019) and qualitative studies have identified the pressure of 'successful' masking as highly anxiety provoking (Hull et al., 2017; Livingston, Shah and Happe, 2019). Participants in the current study described how the masking of emotions, sensory distress and stimming reinforced anxiety. Exhaustion was another mental health related consequence of masking frequently cited by participants in the current and previous work (Bargiela et al., 2016; Hull et al., 2017; Livingstone, Shah, & Happé, 2019; Cage et al., 2018; Rees & Pearson, 2021). In line with this, autistic burnout, characterised as chronic exhaustion, loss of skills, and reduced tolerance to stimulus, is reported to stem from an inability to obtain relief from the pressures, expectations and stress associated with masking (Raymaker et al., 2020). Other consequences of masking replicate findings from previous research including low mood and depression (Cage et al., 2018), disconnection from others (Hull et al., 2017; Livingston et al., 2019) and suicidality (Cassidy et al., 2018).

Cage et al. (2018) suggested that masking may mediate the relationship between negative behaviour from others such as bullying and low autism acceptance, and consequent anxiety and depression, although no mediating role of masking was found in the relationship between experience of stigma and mental health issues (Perry et al., 2021). The current interviews indicate that bullying and low autism acceptance impact anxiety and mood directly, but for many young people masking reinforces and worsens anxiety, low mood, exhaustion, disconnection and poor self-image.

Previous research in the area has suggested that some autistic adults find that their 'compensation' strategies are successful and key to having fulfilling life experiences and that future research should seek to understand which strategies are most useful and 'how their success can be maximised' (Livingston, Shah & Happe, 2019). The current study does not support these conclusions in all the autistic young people we interviewed, who described that many of the potentially 'successful' outcomes of masking actually represented avoiding negative responses from others. This suggests the focus of research should be on promoting acceptance of autistic authenticity, rather than encouraging masking. 'Successful' masking cannot be deemed so without considering the negative, and in some cases traumatic life events, which may drive an individual to mask, or the potential longer-term consequences for mental health, self-image and identity. Encouraging the suppression of the self and enactment of 'social normalcy' reinforces disabling and disempowering 'deficit-based' narratives of autism messages which young people internalise about themselves. Thomas (2020) compares neurodivergent masking to the Finding Nemo character Dory's strategy to 'just keep swimming' and concludes that, 'No amount of swimming... [is] enough if the world will not also adjust to meet you'.

The current study also explored the relationship between authenticity and mental health and found that experiences of being accepted, supported and valued drove authenticity, a positive self-image and a range of positive mental health consequences. Indeed, existing research suggests that authenticity is positively associated with higher self-esteem and life satisfaction (Goldman & Kernis, 2002). Authenticity is also reported as key for recovery from autistic burnout (Raymaker et al., 2020). In the current study, many participants were able to be their most authentic self in the company of other autistic people, and found these interactions and friendships particularly energising, positive and connecting. This replicates existing research findings that autistic people feel best understood, and a sense of belonging, with other autistic people (Crompton, Hallett et al., 2020). Our findings suggest that authenticity may be an alternative outcome to masking for some autistic young people in some conditions; future research should look more

explicitly at how both masking and authenticity impact autistic people's mental health and are impacted by this.

It is also interesting to consider the present findings in relation to research into autistic people's self-knowledge and theory of own mind. Autistic people may introspect in different ways to neurotypical people; some findings suggest that autistic young people find it more difficult than their neurotypical peers to recall autobiographical examples relating to knowledge of one's own personality traits (Robinson, Howlin, & Russell, 2017). In line with this, several participants in the current study noted difficulties in reflecting upon times when they were masking as opposed to 'being myself'. This raises important questions about the qualitative nature and experience of authenticity, as opposed to masking, for autistic people. Introspection differences, and alexithymia, may be important factors in understanding how masking might develop subconsciously.

8. Limitations

The present study has several limitations. Firstly, qualitative research is limited in its capacity to address issues of causality. The associations presented above, depicting the relationship between masking and mental health, and in contrast between authenticity and mental health, are not generalisable to a wider population of autistic young people at this stage. However, as was the aim of this study, the findings have generated a broader understanding of some of the factors likely to be involved in the relationship between autistic teenagers' experiences of masking and mental health (namely a sense of authenticity and acceptance from others), which can be investigated further in future research.

Secondly, while the sample was diverse in some respects (equal numbers of teenagers identifying as male and female, geographical spread of participants), in other ways it was not. There was minimal diversity in the sample in terms of race and gender identity, which limits the breadth of perspectives gathered in this study. In addition, many other aspects of identity including sexual orientation, class, religion or culture were not asked about. These limitations mean that perspectives on how neurotype and other aspects of identity might intersect, and specifically how being autistic and from another minoritised or marginalised community might impact experiences and consequences of masking, were missed.

A third limitation is the reliance on verbal qualitative data to understand something that is sometimes intangible, still developing and not fully conscious. It is possible that some teenagers may have limited conscious awareness of masking and its consequences. Additionally, many autistic people experience alexithymia, a difficulty identifying and describing feelings (Milosavljevic et al., 2016). Many participants in the present study articulated their emotional experienced in great detail, but others found this more difficult, and therefore the experiences of each young person may not have been richly captured. Giving participants the opportunity to write or draw responses to questions may have overcome this limitation, and future research should explore alternative methods to discuss and measure masking. Such methods might also enable the perspectives of autistic people with intellectual disability to be elicited, a group who have been previously excluded from research into masking (Cook et al., 2021).

9. Implications

The current study describes the relationship between masking and mental health in autistic teenagers, highlighting the role of others' behaviour and reactions, social-environmental factors, and self-image.

Firstly, future research should investigate the development and consequences of masking for young people who hold multiple marginalised group memberships i.e. they are neurodivergent and from a Black, Asian or other minority ethnic background. It will be important to investigate how other forms of discrimination, such as racism or transphobia, impact the development of masking.

Secondly, current research strongly indicates that authentic self-expression and presentation has multiple positive mental health consequences for autistic teenagers. Future research is needed to develop and test therapeutic interventions, at an individual, family and system level, to support autistic adolescents to develop a positive identity and self-image as an autistic person.

Thirdly, one of most frequently given consequences of masking, in the current and previous research, is exhaustion and burnout. Research has begun to better define burnout (Raymaker et al., 2020) and the next steps should be to empirically test the relationship between masking, burnout and long term physical and mental health consequences. Research should also aim to develop and test interventions to prevent and support autistic people experiencing burnout.

Fourthly, definitions of masking in the literature need to be expanded to focus more on how autistic people themselves conceptualise the experience, as a holistic experience, rather than purely a set of cognitive or behavioural strategies. Work should be undertaken with autistic people to explore how aspects of stigmatization, additional marginalized identities, and the impact on wellbeing might be included in definitions of masking.

Finally, further clinical research is needed to understand the short- and long-term impact of behavioural interventions, such as Positive Behavioural Support (PBS), on both masking and mental health. For instance, an evaluation of the use of PBS is needed to understand if and how behavioural intervention might be reinforcing masking and suppressing authentic expression or emotional regulation (e.g. stimming).

Findings from this research also have several clinical implications. Firstly, therapeutic support for autistic young people experiencing mental health difficulties must consider their access to environments which are likely to support and drive their authentic expression and interaction; for instance time with other autistic people, contexts which will nurture, value and support the young person's skills and interests, and environments which can meet young people's sensory needs and encourage sensory expression.

Secondly, therapeutic support should consider supporting young people to explore dropping the mask and discovering authenticity in safe contexts. Considerations of intersectionality here are important; particularly in contexts where authentic expression may pose risks to safety for young people who face racist or transphobic discrimination or abuse. Mindfulness is one strategy which could

empower autistic young people to become more aware of their internal experiences which drive both masking and authenticity, which could slowly enable them to step back and make more conscious decisions (Stark, 2020). However, it is essential that clinical interventions do not place all the responsibility on autistic young people to develop skills to 'stop masking'. The difficult experiences and negative social narratives which drive masking cannot be ignored in any therapeutic intervention. A whole system approach should be taken whereby external social or environmental factors such as bullying, which are driving or reinforcing masking and mental health difficulties, should be addressed. Research suggests that autism acceptance training for non-autistic people reduces explicit biases around autism (Jones, DeBrabander, & Sasson, 2021), demonstrating the importance of interventions for non-autistic people.

Thirdly, the long-term consequences of social skills training interventions for autistic young people need to be considered and interventions which encourage autistic young people towards masking and away from authenticity should be discontinued. Research has suggested that social skills training programmes do not achieve their aim of improving wellbeing by teaching young people the skills to form meaningful friendships (e.g. Gates, Kang, & Lerner, 2017). It has been suggested that this is because the groups inhibit young people's authenticity and increase autism stigma (Bottema-Beutel, Park, & Kim, 2018). The current research supports the discontinuation of social skills groups and the development of groups to support autistic young people to develop positive and authentic autistic identity.

10. Conclusion

This qualitative study described for the first time relationships between masking, authenticity, and mental health in autistic young people. Young people described how environmental factors could trigger masking directly, and through their impact on mental health, and that masking in turn impacted mental health. The characteristics of environments that promote a sense of authenticity for autistic young people were also discussed. The findings emphasise the need to consider masking within the context of the individual's broader identity and the environment in which they exist.

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Declaration of competing interest

This study was conducted as part of LC's Doctorate in Clinical Psychology at University College London. LC, LH and WM conceptualised the study. LC collected the data and performed the initial analyses; LC and LH drafted the manuscript. All authors contributed to the design of the study, analysis and interpretation, and revised the manuscript.

References

Ai, W., Cunningham, W. A., & Lai, M.-C. (2022). Reconsidering autistic 'camouflaging' as transactional impression management. *Trends in Cognitive Sciences*. https://doi.org/10.1016/j.tics.2022.05.002

American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (DSM-5®). American Psychiatric Pub.

Baird, G., Simonoff, E., Pickles, A., Chandler, S., Loucas, T., Meldrum, D., & Charman, T. (2006). Prevalence of disorders of the autism spectrum in a population cohort of children in South Thames: the Special Needs and Autism Project (SNAP). *The Lancet, 368*(9531), 210–215. https://doi.org/10.1016/S0140-6736(06)69041-7
Bargiela, S., Steward, R., & Mandy, W. (2016). The experiences of late-diagnosed women with autism spectrum conditions: An investigation of the female autism phenotype. *Journal of Autism and Developmental Disorders, 46*(10), 3281–3294. https://doi.org/10.1007/s10803-016-2872-8

Barker, C., Pistrang, N., & Elliott, R. (2016). Research methods in clinical psychology. *An introduction for students and practitioners* (third ed.). Chichester: John Wiley, Baron-Cohen, S. (2019, April 30). The concept of neurodiversity is dividing the autism community [Blog post]. Retrieved from (https://blogs.scientificamerican.com/observations/the-concept-of-neurodiversity-is-dividing-the-autism-community/).

Berg, K. L., Shiu, C. S., Acharya, K., Stolbach, B. C., & Msall, M. E. (2016). Disparities in adversity among children with autism spectrum disorder: a population-based study. Developmental Medicine & Child Neurology, 58(11), 1124–1131. https://doi.org/10.1111/dmcn.13161

Bernardin, C. J., Mason, E., Lewis, T., & Kanne, S. (2021). "You Must Become a Chameleon to Survive": Adolescent Experiences of Camouflaging, 2021 51:12 Journal of Autism and Developmental Disorders, 51(12), 4422–4435. https://doi.org/10.1007/S10803-021-04912-1.

Botha, M., Dibb, B., & Frost, D.M. (2020). "Autism is me": an investigation of how autistic individuals make sense of autism and stigma. (https://doi.org/10.1080/09687599.2020.1822782).

Botha, M., & Frost, D. M. (2018). Extending the minority stress model to understand mental health problems experienced by the autistic population. *Society and Mental Health, October*, 0–38. https://doi.org/10.1177/2156869318804297

Bottema-Beutel, K., Park, H., & Kim, S. Y. (2018). Commentary on social skills training curricula for individuals with ASD: social interaction, authenticity, and stigma. Journal of Autism and Developmental Disorders, 48(3), 953–964. https://doi.org/10.1007/s10803-017-3400-1

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2), 77–101. https://doi.org/10.1191/1478088706qp0630a Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. Qualitative Research in Sport, Exercise and Health, 11(4), 589–597. https://doi.org/10.1080/2159676X.2019.1628806

- Brede, J., Babb, C., Jones, C., Elliott, M., Zanker, C., Tchanturia, K., ... Mandy, W. (2020). "For Me, the anorexia is just a symptom, and the cause is the autism":

 Investigating restrictive eating disorders in autistic women. *Journal of Autism and Developmental Disorders*, 50, 4280–4296. https://doi.org/10.1007/s10803-020-04470-3
- Brugha, T., Cooper, S., McManus, S., Purdon, S., Smith, J., Scott, F.J., Spiers, N., Tyrer, F., & the NHS Information Centre Community and Mental Health Team. (2012). Estimating the Prevalence of Autism Spectrum Conditions in Adults Extending the 2007 Adult Psychiatric Morbidity Survey. Health and Social Care Information Centre: London.
- Brugha, T., McManus, S., Meltzer, H., Smith, J., Scott, F., Purdon, S., Harris, J., & Bankart, J. (2009). Autism Spectrum Disorders in Adults Living in Households Throughout England. Report from the Adult Psychiatric Morbidity Survey 2007. The NHS Information Centre: London.
- Cage, E., Di Monaco, J., & Newell, V. (2018). Experiences of autism acceptance and mental health in autistic adults. *Journal of Autism and Developmental Disorders*, 48 (2), 473–484. https://doi.org/10.1007/s10803-017-3342-7
- Cage, E., & Troxell-Whitman, Z. (2019). Understanding the reasons, contexts and costs of camouflaging for autistic adults. *Journal of Autism and Developmental Disorders*, 49(5), 1899–1911. https://doi.org/10.1007/s10803-018-03878-x
- Cassidy, S., Bradley, L., Shaw, R., & Baron-Cohen, S. (2018). Risk markers for suicidality in autistic adults. *Molecular Autism*, 9(1), 42. https://doi.org/10.1186/s13229-018-0226-4
- Cath, D. C., Ran, N., Smit, J. H., Van Balkom, A. J., & Comijs, H. C. (2008). Symptom overlap between autism spectrum disorder, generalized social anxiety disorder and obsessive-compulsive disorder in adults: a preliminary case-controlled study. Psychopathology, 41(2), 101–110. https://doi.org/10.1159/000111555
- Cook, J., Hull, L., Crane, L., & Mandy, W. (2021). Camouflaging in autism: A systematic review. Clinical Psychology Review, 89, Article 102080. https://doi.org/10.1016/j.cpr.2021.102080
- Crompton, C. J., Hallett, S., Ropar, D., Flynn, E., & Fletcher-Watson, S. (2020). 'I never realised everybody felt as happy as I do when I am around autistic people': A thematic analysis of autistic adults' relationships with autistic and neurotypical friends and family. *Autism Advanced Online Publication*. https://doi.org/10.1177/1362361320908976
- Crompton, C. J., Ropar, D., Vans-Williams, C. V. M., Flynn, E. G., & Fletcher-Watson, S. (2020). Autistic peer to peer information transfer is highly effective. *Autism, 24* (7), 1704–1712. https://doi.org/10.31219/OSF.IO/J4KNX
- Cross-Disorder Group of the Psychiatric Genomics Consortium. (2013). Identification of risk loci with shared effects on five major psychiatric disorders: A genome-wide analysis. *The Lancet*, 381(9875), 1371–1379. https://doi.org/10.1016/S0140-6736(12)62129-1
- Gates, J. A., Kang, E., & Lerner, M. D. (2017). Efficacy of group social skills interventions for youth with autism spectrum disorder: A systematic review and meta-analysis. Clinical Psychology Review, 52, 164–181. https://doi.org/10.1016/j.cpr.2017.01.006
- Goldman, B. M., & Kernis, M. H. (2002). The role of authenticity in healthy psychological functioning and subjective well-being. *Annals of the American Psychotherapy Association*, 5(6), 18–20.
- Griffiths, S., Allison, C., Kenny, R., Holt, R., Smith, P., & Baron-Cohen, S. (2019). The vulnerability experiences quotient (VEQ): A study of vulnerability, mental health and life satisfaction in autistic adults. *Autism Research*, 12(10), 1516–1528. https://doi.org/10.1002/aur.2162
- Hollocks, M. J., Jones, C. R., Pickles, A., Baird, G., Happé, F., Charman, T., & Simonoff, E. (2014). The association between social cognition and executive functioning and symptoms of anxiety and depression in adolescents with autism spectrum disorders. *Autism Research*, 7(2), 216–228. https://doi.org/10.1002/aur.1361
- Hull, L., Levy, L., Lai, M. C., Petrides, K. V., Cohen, S. B., Allison, C., ... Mandy, W. (2021a). Is social camouflaging associated with anxiety and depression in autistic adults. Molecular Autism, 1–13. https://doi.org/10.1186/s13229-021-00421-1
- Hull, L., Mandy, W., Lai, M. C., Baron-Cohen, S., Allison, C., Smith, P., & Petrides, K. V. (2019). Development and validation of the camouflaging autistic traits questionnaire (CAT-Q). Journal of Autism and Developmental Disorders, 49(3), 819–833. https://doi.org/10.1007/s10803-018-03878-x
- Hull, L., Petrides, K. V., Allison, C., Smith, P., Baron-Cohen, S., Lai, M. C., & Mandy, W. (2017). "Putting on my best normal": Social camouflaging in adults with autism spectrum conditions. *Journal of Autism and developmental Disorders*, 47(8), 2519–2534. https://doi.org/10.1007/s10803-017-3166-5
- Hull, L., Petrides, K. V., & Mandy, W. (2021b). Cognitive PREDICTORS OF SELF-REPORTED CAMOUFLAGING IN AUTISTIC ADolescents. Autism Research, 14(3), 523–532. https://doi.org/10.1002/aur.2407
- Jones, D. R., DeBrabander, K. M., & Sasson, N. J. (2021). Effects of autism acceptance training on explicit and implicit biases toward autism, 136236132098489 Autism. https://doi.org/10.1177/1362361320984896.
- Kim, J. A., Szatmari, P., Bryson, S. E., Streiner, D. L., & Wilson, F. J. (2000). The prevalence of anxiety and mood problems among children with autism and Asperger syndrome. Autism. 4(2), 117–132. https://doi.org/10.1177/1362361300004002002
- Kirkovski, M., Enticott, P. G., & Fitzgerald, P. B. (2013). A review of the role of female gender in autism spectrum disorders. *Journal of Autism and developmental Disorders*, 43(11), 2584–2603. https://doi.org/10.1007/s10803-013-1811-1
- Lai, M. C., Kassee, C., Besney, R., Bonato, S., Hull, L., Mandy, W., & Ameis, S. H. (2019). Prevalence of co-occurring mental health diagnoses in the autism population: a systematic review and meta-analysis. *Lancet Psychiatry*, 6(10), 819–829. https://doi.org/10.1016/S2215-0366(19)30289-5
- Lai, M. C., Lombardo, M. V., Ruigrok, A. N., Chakrabarti, B., Auyeung, B., & Szatmari, P. (2017). Quantifying and exploring camouflaging in men and women with autism. *Autism. 21*(6). 690–702. https://doi.org/10.1177/1362361316671012
- Lawson, W. B. (2020). Adaptive morphing and coping with social threat in autism: An autistic perspective. *Journal of Intellectual Disability Diagnosis and Treatment*, 8 (3), 519–526. https://doi.org/10.6000/2292-2598.2020.08.03.29
- Livingston, L. A., Colvert, E., Social Relationships Study Team, Bolton, P., & Happé, F. (2019). Good social skills despite poor theory of mind: Exploring compensation in autism spectrum disorder. *Journal of Child Psychology and Psychiatry*, 60(1), 102–110. https://doi.org/10.1111/jc
- Livingston, L. A., Shah, P., & Happé, F. (2019). Compensatory strategies below the behavioural surface in autism: a qualitative study. *The Lancet Psychiatry*, 6(9), 766–777. https://doi.org/10.1016/S2215-0366(19)30224-X
- Mandy, W. (2019). Social camouflaging in autism: Is it time to lose the mask? Autism, 23(8), 1879–1881. https://doi.org/10.1177/1362361319878559
- Mazzone, L., Postorino, V., De Peppo, L., Fatta, L., Lucarelli, V., Reale, L., & Vicari, S. (2013). Mood symptoms in children and adolescents with autism spectrum disorders. Research in Developmental Disabilities, 34(11), 3699–3708. https://doi.org/10.1016/j.ridd.2013.07.034
- Milosavljevic, B., Leno, V. C., Simonoff, E., Baird, G., Pickles, A., Jones, C. R., & Happé, F. (2016). Alexithymia in adolescents with autism spectrum disorder: its relationship to internalising difficulties, sensory modulation and social cognition. *Journal of Autism and Developmental Disorders*, 46(4), 1354–1367. https://doi.org/10.1007/s10803-015-2670-8
- Milton, D. (2013c) Natures answer to over-conformity: a deconstruction of pathological demand avoidance. Autism Experts. Accessed from: (http://autismexperts.blogspot.co.uk/2013/03/naturesanswer-to-over-conformity.html).
- Milton, D. (2019). Beyond tokenism: Autistic people in autism research. *The Psychologist*, 32, 2–3 (Retrieved from) (https://thepsychologist.bps.org.uk/volume-32/october-2019/beyond-tokenism-autistic-people-autism-research).
- Milton, D. E. (2012). On the ontological status of autism: the 'double empathy problem'. Disability & Society, 27(6), 883–887. https://doi.org/10.1080/09687599.2012.710008
- Ozsivadjian, A., Knott, F., & Magiati, I. (2012). Parent and child perspectives on the nature of anxiety in children and young people with autism spectrum disorders: a focus group study. *Autism, 16*(2), 107–121. https://doi.org/10.1177/1362361311431703
- Patton, M. Q. (1990). Qualitative evaluation and research methods (second ed.). Newbury Park, CA: Sage.
- Pearson, A., & Rees, J. (2021). 'Masking is life': Experiences of masking in autistic and non-autistic adults. Autism in Adulthood, 00(00), 1–9. https://doi.org/10.31219/osf.io/t6vp2
- Pearson, A., & Rose, K. (2021). A conceptual analysis of autistic masking: understanding the narrative of stigma and the illusion of choice. *Autism in Adulthood, 3*(1). (https://www.liebertpub.com/doi/abs/10.1089/aut.2020.0043).
- Perry, E., Mandy, W., Hull, L., Cage, E., & Holloway, R. (2021). Understanding camouflaging as a response to autism-related stigma: A Social Identity Theory approach. *Journal of Autism and Developmental Disorders*, 0123456789, 1–37. https://doi.org/10.1007/s10803-021-04987-w

- Pickard, H., Rijsdijk, F., Happé, F., & Mandy, W. (2017). Are social and communication difficulties a risk factor for the development of social anxiety? *Journal of the American Academy of Child & Adolescent Psychiatry*, 56(4), 344–351. https://doi.org/10.1016/j.jaac.2017.01.007
- Rai, D., Culpin, I., Heuvelman, H., Magnusson, C. M., Carpenter, P., Jones, H. J., & Pearson, R. M. (2018). Association of autistic traits with depression from childhood to age 18 years. *JAMA Psychiatry*, 75(8), 835–843. https://doi.org/10.1001/jamapsychiatry.2018.1323
- Ratto, A. B., Kenworthy, L., Yerys, B. E., Bascom, J., Wieckowski, A. T., White, S. W., & Scarpa, A. (2018). What about the girls? Sex-based differences in autistic traits and adaptive skills. *Journal of Autism and developmental Disorders*, 48(5), 1698–1711. https://doi.org/10.1007/s10803-017-3413-9
- Raymaker, D. M., Teo, A. R., Steckler, N. A., Lentz, B., Scharer, M., Delos Santos, A., & Nicolaidis, C. (2020). "Having all of your internal resources exhausted beyond measure and being left with no clean-up crew": Defining autistic burnout. *Autism in Adulthood*, 2(2), 1–12. https://doi.org/10.1089/aut.2019.0079
- Robinson, S., Howlin, P., & Russell, A. (2017). Personality traits, autobiographical memory and knowledge of self and others: A comparative study in young people with autism spectrum disorder. *Autism*, 21(3), 357–367.
- Rylaarsdam, L. E., & Guemez Gamboa, A. (2019). Genetic Causes and Modifiers in Autism Spectrum Disorder. Frontiers in Cellular Neuroscience, 13(1). https://doi.org/10.3389/fncel.2019.00385
- Sasson, N. J., Faso, D. J., Nugent, J., Lovell, S., Kennedy, D. P., & Grossman, R. B. (2017). Neurotypical peers are less willing to interact with those with autism based on thin slice judgments. Scientific Reports, 7, 40700. https://doi.org/10.1038/srep40700
- Shakespeare, T. (2006). The social model of disability. In L. J. Davis (Ed.), The disability studies reader (pp. 197-204). New York & London: Routledge.
- Simonoff, E., Pickles, A., Charman, T., Chandler, S., Loucas, T., & Baird, G. (2008). Psychiatric disorders in children with autism spectrum disorders: prevalence, comorbidity, and associated factors in a population-derived sample. *Journal of the American Academy of Child & Adolescent Psychiatry*, 47(8), 921–929. https://doi.org/10.1097/CHI.0b013e318179964f
- Stark, E. (2020). Dropping the mask. *The Psychologist*. (https://thepsychologist.bps.org.uk/dropping-mask).
- Thomas, L. (2020). Just keep swimming: Finding dory. The Lancet Psychiatry, 7(1), 27-28. https://doi.org/10.1016/S2215-0366(19)30489-4
- Tierney, S., Burns, J., & Kilbey, E. (2016). Looking behind the mask: Social coping strategies of girls on the autistic spectrum. *Research in Autism Spectrum Disorders*, 23, 73–83. https://doi.org/10.1016/j.rasd.2015.11.013
- Tseng, M. H., Fu, C. P., Cermak, S. A., Lu, L., & Shieh, J. Y. (2011). Emotional and behavioral problems in preschool children with autism: Relationship with sensory processing dysfunction. Research in Autism Spectrum Disorders, 5(4), 1441–1450. https://doi.org/10.1016/j.rasd.2011.02.004
- Walker, N. (2014, September 27). Neurodiversity: Some basic terms and definitions [Blog post]. Retrieved from (https://neurocosmopolitanism.com/neurodiversity-some-basic-terms-definitions/).
- Willig, C. (1999). Beyond appearances: A critical realist approach to social constructionism. In D. J. Nightingale, & J. Cromby (Eds.), Social constructionist psychology: A critical analysis of theory and practice (pp. 37–51). Buckingham, UK: Open University Press.