This is the accepted version of the following article: Cage E, Cranney R & Botha M (2022) Brief Report: Does Autistic Community Connectedness Moderate the Relationship Between Masking and Wellbeing? *Autism in Adulthood*, which has been published in final form at *Autism in Adulthood* at https://doi.org/10.1089/aut.2021.0096. This original submission version of the article may be used for non-commercial purposes in accordance with the Mary Ann Liebert, Inc., publishers' self-archiving terms and conditions.

# Brief report: Does autistic community connectedness moderate the relationship between masking and wellbeing?

Eilidh Cage<sup>1\*</sup>, Rebekah Cranney<sup>1</sup> & Monique Botha<sup>1</sup>

Department of Psychology, University of Stirling

Running title: Masking, wellbeing and autistic community

## \*Corresponding author:

Dr Eilidh Cage, Department of Psychology, University of Stirling, Stirling, Scotland, FK9 4LA; Eilidh.cage@stir.ac.uk

Key words: Masking; Camouflaging; Autistic Community; Stigma; Mental Wellbeing

Word counts:

Abstract: 298

Community brief: 499

Main text: 2617

Accepting in Autism in Adulthood 16/5/22

#### **Abstract**

**Background**: Masking involves blending in or covering a stigmatised identity, to avoid discrimination and to 'pass' within society. Autistic people often report masking, both intentionally and unintentionally, to get by in social situations. Autistic people who report high rates of masking also tend to experience poorer mental health. It is important we understand whether there are variables which can protect against the negative effects of masking. One such potential variable is autistic community connectedness — being part of and belonging to the autistic community. Past research suggests there are benefits for autistic people socially connecting with other autistic people. We investigated whether autistic community connectedness could moderate the relationship between masking and wellbeing.

**Methods**: One hundred and ninety-six autistic people completed an online survey including measures of autistic community connectedness, masking and mental wellbeing. We used moderation analysis to test whether autistic community connectedness acted as a buffer between masking and wellbeing.

**Results**: Higher self-reported masking related to poorer mental wellbeing. Higher autistic community connectedness related to more positive wellbeing. Higher autistic community connectedness correlated with more masking. However, there was no interaction effect, and autistic community connectedness did not moderate the relationship between masking and wellbeing.

Conclusions: Although autistic community connectedness did relate to more positive mental wellbeing overall, it did not moderate the negative relationship between masking and wellbeing. If masking relates to the prejudice faced by autistic people, those with greater attachment to the autistic community may also be more aware of discrimination against their community. Further, autistic people who are more connected might experience a higher salience of masking when moving between autistic and non-autistic settings. Tackling prejudice towards autistic people is critical in helping to reduce the negative effects associated with masking, and we must endeavour to change perceptions and increase inclusion of autistic people.

#### **Community brief**

## Why is this an important issue?

Lots of autistic people say that they often have to 'mask' the fact they are autistic. This means they might (on purpose or by accident) use strategies like planning a social script before meeting someone, trying to hide their stims, or forcing themselves to use eye contact because non-autistic people expect this. Previous research has shown that the more someone masks, the more they experience poor mental health and wellbeing. We wondered whether feeling connected to the autistic community ("autistic community connectedness") could help protect autistic people from these negative masking outcomes, because many autistic people talk about how they get joy out of being part of this community.

#### What was the purpose of this study?

We aimed to see whether autistic community connectedness could play a role in protecting autistic people against the negative effects of masking on mental wellbeing.

#### What did the researchers do?

We used an online survey which included questions about masking, connectedness to the autistic community, and mental wellbeing. One hundred and ninety-six autistic people completed the survey. We used an analysis called 'moderation analysis' which can be used to see if something is acting like a buffer or protector between two things (in this case, masking and wellbeing).

## What were the results of the study?

Although people with higher autistic community connectedness generally had more positive mental wellbeing overall, we found that community connectedness was not acting like a protector. In other words, masking still related to poorer wellbeing, even when someone had high autistic community connectedness.

## What do these findings add to what was already known?

Our findings show that autistic community connectedness can be something positive for mental wellbeing, but we think that masking keeps happening because there is so much stigma and prejudice towards autistic people. It's difficult for autistic people to "take the mask off", and people who are more connected to the autistic community may be even *more* aware of the prejudice and discrimination experienced by the autistic community. Our findings provide further support for the idea that masking has a lot to do with experiences of stigma.

## What are potential weaknesses in the study?

Our participants were mostly female, and we recruited them via online communities. There may already be high feelings of autistic community connectedness in these participants, so our findings won't be the same for everyone, and it would be useful to have more people who actively reject being part of the autistic community within studies like ours, as well as having more diverse participants involved.

## How will these findings help autistic adults now or in the future?

We show that autistic community connectedness is related to wellbeing, and we need to support autistic people to feel like they can freely explore this community and decide whether they want to get involved or not. If we want to help autistic people mask less, we really need to work harder on creating societies that are open to authentically autistic people.



## **Background**

'Masking' (sometimes called 'camouflaging') is an experience frequently reported for many autistic people within multiple different contexts. <sup>1–4</sup> Masking involves blending in with the neurotypical majority, using intentional or unintentional ways to get by in social situations – such as developing scripts for conversations, suppressing stimming, or forcing oneself to make eye contact. <sup>5,6</sup> Due to ongoing conceptual discussions, <sup>6,7</sup> we use the term masking in this paper, to respect the term which the autistic community tends to use most often. <sup>4</sup>

While many people, including autistic people, will try to maintain a positive reputation, <sup>8</sup> masking goes beyond everyday reputation management as it involves the concealment of a stigmatised identity, and presenting as though one does not have that identity. Although there may be unique aspects of autistic masking, <sup>6</sup> similar experiences have been reported for other people with different stigmatised identities or experiences, for example, people who stutter, <sup>9</sup> people with social anxiety, <sup>10–12</sup> chronic pain, <sup>13</sup> chronic illness, <sup>14,15</sup> and sexual and gender minorities. <sup>16,17</sup> Masking may persist due to the prejudice these groups experience in society. <sup>18</sup> Masking of a stigmatised identity has a detrimental effect on wellbeing - a recent systematic review of the autism literature highlighted that masking relates to poorer mental health, <sup>3</sup> with higher rates of masking related to greater depression, <sup>5,19,20</sup> anxiety, <sup>2,20</sup> social anxiety, <sup>20</sup> suicidality, <sup>21</sup> and more broadly psychological distress <sup>22</sup> and poorer mental wellbeing. <sup>5</sup> Given these findings, we must try to understand if there are ways of protecting against the negative relationship between masking and wellbeing.

One potential variable that could play a protective role is autistic community connectedness (ACC). We can think of ACC in terms of three components: having a sense of belonging and shared experiences with the autistic community, being socially connected to other autistic people, and advocating for this community (political connectedness).<sup>23</sup> Previous work has described how autistic people build invisible infrastructures of support for each other in an often hostile society, confounding the notion of autism as a strictly social, communicational deficit. <sup>24</sup> Autistic communities exist in many forms, where autistic sociality can flourish. <sup>24,25</sup> Further, greater ACC may act as a buffer between minority stress and mental health, ameliorating against the stress associated with having a stigmatised minority identity. <sup>26</sup> Other research has looked at related concepts, such as autistic identity, whereby someone feels that being autistic is part of who they are (personal identity) or they identify as being like other autistic people (social identity). A strong sense of autistic personal and/or social identity relates to more positive wellbeing and self-esteem. <sup>27–29</sup> Other studies show how autistic people derive joy from friendships with other autistic people <sup>30</sup> and experience good rapport together. <sup>31</sup> Given these potential benefits for wellbeing, it is worth investigating whether ACC can buffer against the negative impacts of masking. This study therefore aimed to examine whether ACC moderated the relationship between masking and mental wellbeing.

#### **Methods**

#### **Participants**

In total, 196 autistic people took part in the study. The mean age was 32.47 (SD=11.15, range 18-67). Participants could write their gender identity in an open textbox - most identified as female (63.3%; see Table 1). Most self-reported a formal autism diagnosis (n=129, 65.8%), with 35 currently seeking a diagnosis (17.9%), 27 self-identifying but not seeking a diagnosis

(13.8%), and five preferred not to say (2.6%). All participants scored above 14 on the Ritvo Autism and Aspergers Diagnostic Scale (RAADS-14 <sup>32</sup> mean=32.71, *SD*=6.17, range 14–42). Most preferred identity-first language (n=136, 69.4%), or had no preference (n=46, 23.5%), with fewer preferring person-first language (n=14, 7.1%). We present other demographic information in Table 1, with most participants White, from the UK, in employment and educated to degree level. We recruited participants via adverts on Facebook, Twitter, Instagram, and via autism organisations, community groups and charities. Recruitment took place in June 2021. We obtained ethical approval from the University of Stirling General University Ethics Panel Delegated Authority and all participants gave informed consent before starting the study.

## [Insert Table 1 here]

#### Materials & Procedure

Participants completed an online survey, presented using 'Qualtrics'. The survey took 12 minutes to complete on average, and participants first answered demographic questions (e.g., age, gender) and then the following measures:

Ritvo Autism and Asperger Diagnostic Scale (RAADS-14). We used this measure as a brief screen to confirm self-reported diagnosis or identification among participants. This measure has adequate sensitivity for detecting self-reported autistic traits. Participants rated 14 statements on a 4-point scale (0 'never true' to 3 'true now and when I was young'), related to different autistic characteristics, such as social communication and sensory sensitivities. A score of 14 or above suggests an autism diagnosis may be likely, with a total score ranging between 0 and 42. Internal consistency was acceptable (Cronbach's  $\alpha$ =.66).

Autistic Community Connectedness (ACC). We used this measure to determine how connected to the autistic community each participant felt. Participants read ten statements and rated their agreement on a 6-point Likert scale (1, 'strongly disagree' to 6, 'strongly agree'), for example, "I feel a sense of belonging to the autistic community". Total scores could range from 10 to 60, with higher scores reflecting greater connectedness. Internal consistency was very good ( $\alpha$ =.91).

Camouflaging Autistic Traits Questionnaire (CATQ). <sup>5</sup> We used this measure to establish how much participants reported intentionally using masking behaviours. The original measure uses the term "camouflaging" with three subscales titled "masking", "assimilation" and "compensation". We used the overall total score and refer to this as "masking" in this paper to align with the preferences of the autistic community. <sup>4,6,7</sup> Participants rated 25 items on a 7-point Likert scale (1, 'strongly disagree' to 7, 'strongly agree'), such as "I have developed a script to follow in social situations". Total scores ranged from 25 to 175, with higher scores indicating more masking. Internal consistency was very good ( $\alpha$ =.88).

Warwick Edinburgh Mental Wellbeing Scale (WEMWBS). <sup>34</sup> We used the WEMWBS to measure current mental wellbeing. We selected this measure as all items are positively worded, and potentially less distressing (however, we still directed participants to sources of support at the end of the study). There are 14 items (e.g., "I've been feeling cheerful"), with participants responding on a 5-point Likert scale (1, 'none of the time' to 5, 'all of the time'). Total scores ranged from 14 to 70, with higher scores indicating more positive wellbeing. To

the best of our knowledge the measure has not been validated for autistic adults, but prior studies indicate excellent internal consistency  $^{29,35}$  which we also noted ( $\alpha = .92$ ).

## Design and data analysis

This study had a cross-sectional survey design, and we analysed data using SPSS (Version 27) with the PROCESS add-on for moderation analysis. CAT-Q scores were the independent variable, WEMWBS the dependent variable, and ACC the moderator. For moderation, we mean-centred the variables to avoid potential multicollinearity with the interaction term. Although our research team is neurodivergent, due to funding limitations (this study was RCs Masters' dissertation), we could only pay an autistic non-researcher at the start of the study to discuss the relevance of the topic to the autistic community and gather their feedback on the questionnaire. They indicated the topic was relevant and the questionnaire was accessible.

#### **Results**

Overall, the mean CAT-Q score was 131.62 (SD=19.30; range 73-171), mean WEMWBS score was 39.16 (SD=9.76, range 14-67), and mean ACC score was 41.34 (SD=10.67, range 15-60). Masking and wellbeing were significantly negatively correlated (r= -.19, p=.009) and ACC and wellbeing were positively correlated at a marginal significance threshold (r=.14, p=.047). ACC and masking were significantly positively correlated (r=.20, p=.005).

In the moderation analysis, the overall model was significant ( $R^2$ =.07, F(3, 192)=4.67, p<.001). There was a significant positive relationship between ACC and wellbeing (b=.17, p=.009, 95% Confidence Intervals (CI)[.04, .30]). There was a significant negative relationship between masking and wellbeing (b= -.11, p=.002, CI[-.18, -.04]). However, there was no significant interaction effect (b=.0002, p=.96, CI[-.01, .01]), indicating no moderation was occurring. The interaction plot (Figure 1) shows that when masking is lower, wellbeing is higher - and those with higher ACC have the most positive wellbeing compared to those with medium or low ACC. As masking increases, wellbeing decreases, and although those with high ACC still have higher wellbeing, the negative relationship between masking and wellbeing still happens – therefore ACC is not acting as a moderator.

[Figure 1 here]

#### **Discussion**

We aimed to investigate the relationship between masking, mental health, and autistic community connectedness. We hypothesised that higher masking would predict poorer mental health, while ACC may moderate this relationship. As expected, higher masking predicted poorer mental wellbeing, and although higher ACC related to more positive wellbeing, it did not moderate (buffer) against the negative relationship between masking and wellbeing.

There are several potential reasons why we found no moderating effect of ACC. The negative relationship between masking and wellbeing may be difficult to change because it relates to the stigmatisation of autistic people. Masking may happen due to the stigma society attaches to being autistic, given that masking is a strategy often employed to avoid marginalisation, prejudice and victimisation. <sup>4,18</sup> Prejudice towards autistic people manifests itself in many ways, for example, in rapid, negative biases when non-autistic people form first impressions

of autistic people. <sup>37</sup> Even when autistic people report that they are masking, non-autistic people still generate negative first impressions. <sup>38</sup> Stigmatising another group involves seeing that group as "other", fundamentally different, and sometimes as less than human, and we see this dehumanisation not only amongst the general public, <sup>39</sup> but within autism research itself. <sup>40</sup> Prejudice against autistic people is therefore systemic, and even strong community connections may be unable to buffer against this. If trying to mitigate against the negative impacts of masking, we need to create societal level change. This change is possible – research has shown how training can improve non-autistic people's attitudes <sup>41</sup> and behavioural intentions. <sup>42</sup> Reducing the 'double empathy problem' – mutual misunderstandings between different groups – may also help improve rapport and understanding between autistic and non-autistic people. <sup>43</sup>

Since higher ACC was related to higher wellbeing overall, this finding shows that ACC still has benefits, and we should find ways to support autistic people to access and explore the autistic community. Previous research has focused on a social identity approach, and the benefits of a positive autistic identity for wellbeing, showing how stronger autistic social identity may act as a buffer against poor mental health, <sup>27</sup> more pride in being autistic relates to higher self-esteem <sup>29</sup> and generally how greater social identification with autistic people and other groups in general relates to more positive mental health. <sup>28</sup> Community connectedness goes beyond identity (seeing being autistic as part of oneself and identifying with other autistic people) as ACC considers sense of belonging, social connections, and advocacy. <sup>23</sup> These related concepts support other work showing how autistic peer-to-peer relationships can bring joy. <sup>30</sup> More work considering connections to *other* communities may also be useful, as being involved in other communities likely has benefits for wellbeing. <sup>28</sup>

We found that greater ACC correlated with *more* masking, and we believe this further supports our argument regarding the impact of prejudice. This finding aligns with previous work which shows that higher autistic social identity relates to more masking, and that outness and masking relates to worse mental health in the autistic community. <sup>18,48,49</sup> Those who have stronger connections to the autistic community may be more aware of systemic barriers to inclusion and how society is not ready for unmasked autistic people. 46 Alternatively, those who mask more may be more socially aware and therefore more interested in getting involved in the community. Further, those more connected might have increased awareness of masking because they move more between autistic and non-autistic spaces. In a qualitative case study about an autistic adolescent, this adolescent experienced relief upon discovering the autistic community, but then struggled with moving between a community in which he could be more himself, and one in which he could not. <sup>25</sup> Outside the autism literature, we see this "double-bind" happening for other stigmatised communities – for example, concealing a lesbian, gay or bisexual (LGB) identity is related to poorer wellbeing, and greater outness as being LGB is also associated with poorer wellbeing. 50 Increased outness may result in higher victimisation, but masking is a cognitive burden, and may increase the impact of internalised stigma on mental health. Taking ownership of a stigmatised identity within a hostile and discriminatory society likely increases minority stress. 49,51

More broadly, it is worth considering our findings in light of stereotypes and discourses around 'autism'. <sup>44</sup> Some of these discourses have suggested that 'community' is not possible for autistic people. <sup>45</sup> Autistic people are exposed to deficit-focused rhetoric, negative biases

and regular dehumanisation. <sup>40</sup> We found a positive relationship between autistic community connectedness and wellbeing, but we must consider how some autistic people do not want to associate themselves with the autistic community. <sup>46,47</sup> The autistic community also has systemic issues that make it harder for multiply minoritized individuals to connect (such as racism). <sup>52</sup> In Westernised societies, we do not foster a positive image of being autistic, and some might distance themselves from the community in response (as seen in other domains). <sup>53</sup> More research on a lack of and/or barriers to connectedness and the potential impact of this, particularly on wellbeing, may be useful.

This study is not without limitations: most participants identified as female, although we had a reasonable number of non-binary participants compared to previous research. Autistic women may find support via the online autistic community particularly when late diagnosed. <sup>54,55</sup> However, due to our small sample size for most genders aside from female, we were not able to investigate gender differences. In studies of self-reported masking among autistic adults, half report gender differences, and half do not. <sup>3</sup> It is worth noting that males, non-binary and transgender participants are often underrepresented or sample sizes underpowered in masking research. We also do not know if any autistic people with intellectual disability (ID) participated. Further research examining whether masking happens for those with ID may be insightful. <sup>3</sup> Studies with parents of children with ID indicate that 'concealment' can be a feature of their lives in response to ableism. <sup>56</sup> More research considering both masking and ACC through an intersectional lens would be beneficial.

We recruited participants through online spaces (as this study took place during COVID-19), and the internet can provide a safe environment for autistic people to communicate with each other, share experiences and advocate. <sup>57,58</sup> Autistic community connectedness may be higher in people who frequently use online spaces. It is unclear how the pandemic may have influenced responses, for example, whether autistic people feel more or less connected during this time. Additionally, our study examines the relationship between only three variables – in reality, there are undoubtedly other factors which play a role in the relationship between masking and wellbeing. Further longitudinal work would also be useful in this regard. Finally, we used a wellbeing measure that researchers did not develop specifically for autistic people – autistic wellbeing may be different to non-autistic wellbeing, and there is a need for autistic-specific measures. <sup>59</sup>

## **Conclusions**

Despite these limitations, our study investigates relationships between autistic community connectedness, masking, and wellbeing, for the first time. While autistic community connectedness does relate to more positive wellbeing, it does not play a protective role against the potentially negative impacts of masking, perhaps because it cannot override the prejudice that exists towards autistic people. We call for a continued focus on the social-environmental factors that relate to masking and more research on how we can create inclusive spaces for autistic people.

#### Acknowledgements

Thank you to the autistic person who provided feedback early on in this study. Thank you to all of our participants for their time. This paper is available as a pre-print on PsyArXiv at DOI: 10.31234/osf.io/p6bt5

#### **Author confirmation statement**

RC and EC conceived of the study. MB provided the ACC measure. RC put the survey on Qualtrics and recruited the participants as part of their MSc Dissertation at the University of Stirling. EC analysed the data and wrote the first draft of this manuscript. MB and RC contributed to subsequent drafts. All authors approved the final version.

#### **Conflict of interest statement**

The authors have no conflicts of interest to declare.

## **Funding statement**

This project received some financial support from the Department of Psychology at the University of Stirling.

#### References

- 1. Hull L, Petrides KV, Allison C, et al. "Putting on My Best Normal": Social Camouflaging in Adults with Autism Spectrum Conditions. *J Autism Dev Disord*. 2017;47(8):2519-2534. doi:10.1007/s10803-017-3166-5
- 2. Cage E, Troxell-Whitman Z. Understanding the Reasons, Contexts and Costs of Camouflaging for Autistic Adults. *J Autism Dev Disord*. 2019;49(5):1899-1911. doi:10.1007/s10803-018-03878-x
- 3. Cook J, Hull L, Crane L, Mandy W. Camouflaging in autism: A systematic review. *Clinical Psychology Review*. 2021;89:102080. doi:10.1016/j.cpr.2021.102080
- 4. Pearson A, Rose K. A Conceptual Analysis of Autistic Masking: Understanding the Narrative of Stigma and the Illusion of Choice. *Autism In Adulthood*. 2021;3(1):52-60. doi:10.1089/aut.2020.0043
- 5. Hull L, Mandy W, Lai MC, et al. Development and Validation of the Camouflaging Autistic Traits Questionnaire (CAT-Q). *J Autism Dev Disord*. 2019;49(3):819-833. doi:10.1007/s10803-018-3792-6
- 6. Miller D, Rees J, Pearson A. "Masking Is Life": Experiences of Masking in Autistic and Nonautistic Adults. *Autism in Adulthood*. Published online May 17, 2021. doi:10.1089/aut.2020.0083
- 7. Lawson WB. Adaptive Morphing and Coping with Social Threat in Autism: An Autistic Perspective. *Journal of Intellectual Disability Diagnosis and Treatment*. 2020;8(3):519-526. doi:10.6000/2292-2598.2020.08.03.29

- 8. Cage E, Pellicano E, Shah P, Bird G. Reputation Management: Evidence for Ability But Reduced Propensity in Autism. *Autism Research*. 2013;6(5):433-442. doi:10.1002/aur.1313
- 9. Gerlach H, Chaudoir SR, Zebrowski PM. Relationships between stigma-identity constructs and psychological health outcomes among adults who stutter. *Journal of Fluency Disorders*. 2021;70:105842. doi:10.1016/j.jfludis.2021.105842
- 10. Kocovski NL, MacKenzie MB, Albiani JJ, et al. Safety Behaviors and Social Anxiety: An Examination of the Social Phobia Safety Behaviours Scale. *J Psychopathol Behav Assess*. 2016;38(1):87-100. doi:10.1007/s10862-015-9498-6
- 11. Vassilopoulos SP. Interpretations for Safety Behaviours in High and Low Socially Anxious Individuals. *Behavioural and Cognitive Psychotherapy*. 2009;37(2):167-178. doi:10.1017/S1352465809005189
- 12. McManus F, Sacadura C, Clark DM. Why social anxiety persists: An experimental investigation of the role of safety behaviours as a maintaining factor. *Journal of Behavior Therapy and Experimental Psychiatry*. 2008;39(2):147-161. doi:10.1016/j.jbtep.2006.12.002
- 13. Wakefield EO, Puhl RM, Litt MD, Zempsky WT. "If It Ever Really Hurts, I Try Not to Let Them Know:" The Use of Concealment as a Coping Strategy Among Adolescents With Chronic Pain. *Frontiers in Psychology*. 2021;12:1840. doi:10.3389/fpsyg.2021.666275
- 14. Cook JE, Salter A, Stadler G. Identity Concealment and Chronic Illness: A Strategic Choice. *Journal of Social Issues*. 2017;73(2):359-378. doi:10.1111/josi.12221
- 15. Cook JE, Germano AL, Stadler G. An Exploratory Investigation of Social Stigma and Concealment in Patients with Multiple Sclerosis. *International Journal of MS Care*. 2016;18(2):78-84. doi:10.7224/1537-2073.2015-021
- 16. Livingston NA, Flentje A, Brennan J, Mereish EH, Reed O, Cochran BN. Real-time associations between discrimination and anxious and depressed mood among sexual and gender minorities: The moderating effects of lifetime victimization and identity concealment. *Psychology of Sexual Orientation and Gender Diversity*. 2020;7(2):132-141. doi:10.1037/sgd0000371
- 17. Bry LJ, Mustanski B, Garofalo R, Burns MN. Management of a Concealable Stigmatized Identity: A Qualitative Study of Concealment, Disclosure, and Role Flexing Among Young, Resilient Sexual and Gender Minority Individuals. *Journal of Homosexuality*. 2017;64(6):745-769. doi:10.1080/00918369.2016.1236574
- 18. Perry E, Mandy W, Hull L, Cage E. Understanding Camouflaging as a Response to Autism-Related Stigma: A Social Identity Theory Approach. *J Autism Dev Disord*. Published online March 31, 2021. doi:10.1007/s10803-021-04987-w
- 19. Cage E, Di Monaco J, Newell V. Experiences of Autism Acceptance and Mental Health in Autistic Adults. *J Autism Dev Disord*. 2018;48(2):473-484. doi:10.1007/s10803-017-3342-7

- 20. Hull L, Levy L, Lai MC, et al. Is social camouflaging associated with anxiety and depression in autistic adults? *Molecular Autism*. 2021;12(1):13. doi:10.1186/s13229-021-00421-1
- 21. Cassidy S, Bradley L, Shaw R, Baron-Cohen S. Risk markers for suicidality in autistic adults. *Molecular Autism*. 2018;9(42):1-14.
- 22. Beck JS, Lundwall RA, Gabrielsen T, Cox JC, South M. Looking good but feeling bad: "Camouflaging" behaviors and mental health in women with autistic traits. *Autism*. 2020;24(4):809-821. doi:10.1177/1362361320912147
- 23. Botha M, Dibb B, Frost D. "It's Being a Part of a Grand Tradition, a Grand Counter-Culture Which Involves Communities": A Qualitative Investigation of Autistic Community Connectedness.; 2021. doi:10.31219/osf.io/atd69
- 24. Ryan Idriss C. Invisible Autistic Infrastructure: Ethnographic Reflections on an Autistic Community. *Medical Anthropology*. 2021;40(2):129-140. doi:10.1080/01459740.2020.1849185
- 25. Bagatell N. From Cure to Community: Transforming Notions of Autism. *Ethos*. 2010;38(1):33-55. doi:10.1111/j.1548-1352.2009.01080.x
- 26. Botha M. Autistic community connectedness as a buffer against the effects of minority stress. Published online 2020. doi:10.15126/thesis.00854098
- 27. Cooper K, Smith LGE, Russell A. Social identity, self-esteem, and mental health in autism. *European Journal of Social Psychology*. 2017;47(7):844-854. doi:10.1002/ejsp.2297
- 28. Maitland CA, Rhodes S, O'Hare A, Stewart ME. Social identities and mental well-being in autistic adults. *Autism*. Published online May 19, 2021:13623613211004328. doi:10.1177/13623613211004328
- 29. Corden K, Brewer R, Cage E. Personal Identity After an Autism Diagnosis: Relationships With Self-Esteem, Mental Wellbeing, and Diagnostic Timing. *Frontiers in Psychology*. 2021;12:3051. doi:10.3389/fpsyg.2021.699335
- 30. Crompton CJ, Hallett S, Ropar D, Flynn E, Fletcher-Watson S. '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.* 2020;24(6):1438-1448. doi:10.1177/1362361320908976
- 31. Crompton CJ, Ropar D, Evans-Williams CV, Flynn EG, Fletcher-Watson S. Autistic peer-to-peer information transfer is highly effective. *Autism.* 2020;24(7):1704-1712. doi:10.1177/1362361320919286
- 32. Eriksson JM, Andersen LM, Bejerot S. RAADS-14 Screen: validity of a screening tool for autism spectrum disorder in an adult psychiatric population. *Molecular Autism*. 2013;4(1):49. doi:10.1186/2040-2392-4-49

- 33. Kember SM, Williams MN. Autism in Aotearoa: Is the RAADS-14 a valid tool for a New Zealand population? *European Journal of Psychological Assessment*. 2021;37(3):247-257. doi:10.1027/1015-5759/a000598
- 34. Tennant R, Hiller L, Fishwick R, et al. The Warwick-Edinburgh Mental Well-being Scale (WEMWBS): development and UK validation. *Health and Quality of Life Outcomes*. 2007;5(1):63. doi:10.1186/1477-7525-5-63
- 35. Cai RY, Richdale AL, Dissanayake C, Uljarević M. Resting heart rate variability, emotion regulation, psychological wellbeing and autism symptomatology in adults with and without autism. *International Journal of Psychophysiology*. 2019;137:54-62. doi:10.1016/j.ijpsycho.2018.12.010
- 36. Hayes A. PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modelling [White paper]. Published online 2012. http://www.afhayes.com/public/process2012.pdf
- 37. Sasson NJ, Faso DJ, Nugent J, Lovell S, Kennedy DP, Grossman RB. Neurotypical Peers are Less Willing to Interact with Those with Autism based on Thin Slice Judgments. *Scientific Reports*. 2017;7:srep40700. doi:10.1038/srep40700
- 38. Belcher HL, Morein-Zamir S, Mandy W, Ford RM. Camouflaging intent, first impressions, and age of asc diagnosis in autistic men and women. *Journal of Autism and Developmental Disorders*. Published online August 3, 2021. doi:10.1007/s10803-021-05221-3
- 39. Cage E, Di Monaco J, Newell V. Understanding, attitudes and dehumanisation towards autistic people. *Autism.* 2019;23(6):1373-1383. doi:10.1177/1362361318811290
- 40. Botha M. Academic, Activist, or Advocate? Angry, Entangled, and Emerging: A Critical Reflection on Autism Knowledge Production. *Frontiers in Psychology*. 2021;12:4196. doi:10.3389/fpsyg.2021.727542
- 41. Jones D, DeBrabander K, Sasson N. Effects of autism acceptance training on explicit and implicit biases toward autism. *Autism*. 2021;136236132098489. doi:10.1177/1362361320984896
- 42. Jones DR, Morrison KE, DeBrabander KM, Ackerman RA, Pinkham AE, Sasson NJ. Greater Social Interest Between Autistic and Non-autistic Conversation Partners Following Autism Acceptance Training for Non-autistic People. *Frontiers in Psychology*. 2021;12:4026. doi:10.3389/fpsyg.2021.739147
- 43. Chapple M, Davis P, Billington J, Myrick JA, Ruddock C, Corcoran R. Overcoming the Double Empathy Problem Within Pairs of Autistic and Non-autistic Adults Through the Contemplation of Serious Literature. *Frontiers in Psychology*. 2021;12:3011. doi:10.3389/fpsyg.2021.708375
- 44. Houting J den, Botha M, Cage E, Jones DR, Kim SY. Shifting stigma about autistic young people. *The Lancet Child & Adolescent Health*. 2021;0(0). doi:10.1016/S2352-4642(21)00309-6

- 45. Barnbaum DR. *The Ethics of Autism: Among Them, But Not of Them.* Indiana University Press; 2008.
- 46. Botha M, Dibb B, Frost DM. "Autism is me": an investigation of how autistic individuals make sense of autism and stigma. *Disability & Society*. 2020;0(0):1-27. doi:10.1080/09687599.2020.1822782
- 47. Hickey A, Crabtree J, Stott J. 'Suddenly the first fifty years of my life made sense': Experiences of older people with autism. *Autism*. 2018;22(3):357-367. doi:10.1177/1362361316680914
- 48. Cage E, Troxell-Whitman Z. Understanding the Relationships Between Autistic Identity, Disclosure, and Camouflaging. *Autism in Adulthood*. 2020;2(4):334-338. doi:10.1089/aut.2020.0016
- 49. Botha M, Frost DM. Extending the Minority Stress Model to Understand Mental Health Problems Experienced by the Autistic Population. *Society and Mental Health*. 2020;10(1):20-34. doi:10.1177/2156869318804297
- 50. Riggle EDB, Rostosky SS, Black WW, Rosenkrantz DE. Outness, concealment, and authenticity: Associations with LGB individuals' psychological distress and well-being. *Psychology of Sexual Orientation and Gender Diversity*. 2017;4(1):54-62. doi:10.1037/sgd0000202
- 51. Meyer IH. Prejudice, Social Stress, and Mental Health in Lesbian, Gay, and Bisexual Populations: Conceptual Issues and Research Evidence. *Psychological Bulletin*. 2003;129(5):674-697. doi:10.1037/0033-2909.129.5.674
- 52. Giwa Onaiwu M. "They Don't Know, Don't Show, or Don't Care": Autism's White Privilege Problem. *Autism in Adulthood*. 2020;2(4):270-272. doi:10.1089/aut.2020.0077
- 53. Crocker J, Major B. Social Stigma and Self-Esteem: The Self-Protective Properties of Stigma. *Psychological Review*. 1989;96(4):608-630.
- 54. Leedham A, Thompson AR, Smith R, Freeth M. 'I was exhausted trying to figure it out': The experiences of females receiving an autism diagnosis in middle to late adulthood. *Autism.* 2020;24(1):135-146. doi:10.1177/1362361319853442
- 55. Haney JL, Cullen JA. Learning About the Lived Experiences of Women with Autism from an Online Community. *Journal of Social Work in Disability & Rehabilitation*. 2017;16(1):54-73. doi:10.1080/1536710X.2017.1260518
- 56. Niedbalski J. Managing Stigma—the Experiences of Parents of Children with Intellectual Disability. *Polish Sociological Review*. 2021;215(3):386-404.
- 57. Parsloe S. Discourses of Disability, Narratives of Community: Reclaiming an Autistic Identity Online. *Journal Of Applied Communication Research*. 2015;43(3):336-356. doi:10.1080/00909882.2015.1052829
- 58. Bertilsdotter Rosqvist H, Brownlow C, O'Dell L. Mapping the social geographies of autism online and off-line narratives of neuro-shared and separate spaces. *Disability & Society*. 2013;28(3):367-379. doi:10.1080/09687599.2012.714257

59. Milton D, Sims T. How is a sense of well-being and belonging constructed in the accounts of autistic adults? *Disability & Society*. 2016;31(4):520-534. doi:10.1080/09687599.2016.1186529



Table 1. Demographic information including gender, employment, education, ethnicity/race and country.

	N (%)
Gender	
Female	124 (63.3%)
Non-binary	28 (14.3%)
Male	25 (12.8%)
Genderfluid	4 (2%)
Trans male	4 (2%)
Agender	3 (1.5%)
Gender non-conforming	1 (.5%)
Demifemale	1 (.5%)
Prefer not to say	6 (3%)
Employment	
Student	64 (32.7%)
Employed Full-time	62 (31.6%)
Employed Part-time	38 (19.4%)
Self-employed	19 (9.7%)
Unemployed	30 (15.3%)
Retired	5 (2.6%)
Carer	9 (4.6%)
Prefer not to say	2 (1.0%)
Highest level of education	2 (1.070)
No formal qualifications	3 (1.5%)
High school qualifications	50 (25.5%)
College or diploma or equivalent	20 (10.2%)
Undergraduate degree or equivalent	71 (36.2%)
Masters degree or equivalent	34 (17.3%)
Doctoral degree (PhD) or equivalent	7 (3.6%)
Other qualifications	2 (1.0%)
Prefer not to say	9 (4.6%)
Ethnicity / Race	7 (4.070)
Asian	2 (1.0%)
Black / African / Caribbean	1 (.5%)
Hispanic / Latino	3 (1.5%)
Mixed / Multi-ethnic	17 (8.7%)
Native people / Indigenous	2 (1.0%)
White / Caucasian	167 (85.2%)
	, ,
Prefer not to say Other*	2 (1.0%)
	2 (1.0%)
Country United Vinedom	01 (46 40/)
United Kingdom	91 (46.4%)
Other European countries	11 (5.5%)
United States of America	60 (30.6%)
Canada	14 (7.1%)
Australia and New Zealand	16 (8.1%)
Asia	4 (2.0%)

<sup>\*</sup>Two participants self-reported as Metis and Ashkenazi.

# **Figure Legends**

Figure 1. Interaction plot showing the relationship between masking and wellbeing, and low, medium and high autistic community connectedness (adjusted values from moderation analysis).

