

“There’s No Separating My View of My Body from My Autism”: A qualitative study of positive body image in autistic individuals

Phaedra Longhurst^{a,*}, Jane Aspell^a, Jennifer Todd^{a,b}, Viren Swami^{a,b}

^a School of Psychology and Sport Science, Anglia Ruskin University, Cambridge, United Kingdom

^b Centre for Psychological Medicine, Perdana University, Kuala Lumpur, Malaysia

ARTICLE INFO

Keywords:

Positive body image
Autism
Neurodiversity
Qualitative research
Grounded theory

ABSTRACT

While scholars have investigated positive body image across diverse populations, extant theory largely excludes those with differing socio-cognitive experiences, such as autistic individuals. Using constructivist grounded theory, this study sought to develop a grounded theory of positive body image in autistic individuals. One-to-one interviews with photo-elicitation were conducted with 20 autistic adults (7 women, 8 men, 5 non-binary/agender; aged 18–53 years) from the United Kingdom. Through a process of open, axial, and focused coding, a grounded theory was developed around a core category of positive body image in autistic adults and was found to comprise six themes: body connection, body acceptance, appreciating body functionality and neurodivergent strengths, having a body-positive protective filter, taking care of the body, and body and appearance neutrality. Our findings suggest that some aspects of positive body image in autistic individuals are consistent with those found in neurotypical adults. However, positive body image in autistic individuals further encompasses both the *sensory* (i.e., how the body is felt) and *aesthetic* (i.e., how the body is seen) body. These findings may stimulate research aimed at improving positive body image in autistic populations.

1. Introduction

Body image is a multidimensional, multifaceted construct with positive and negative dimensions (Cash, 2012; Tylka, 2018). Historically, research into body image has focused on the negative dimension (e.g., body dissatisfaction; Tylka & Wood-Barcalow, 2015b), but scholars have more recently shifted their attention toward exploring aspects of positive body image to provide a more comprehensive, holistic understanding (Tylka, 2019). *Positive body image* is defined as having an “overarching love and respect for the body” (Wood-Barcalow et al., 2010, p. 112) and involves appreciating and accepting the body in terms of its appearance and functionality, being aware of and responding to the body’s needs, and filtering social messages in a body-protective manner (Daniels et al., 2018). Research has shown that positive body image contributes to positive outcomes (e.g., well-being, engaging in adaptive health-related behaviours) over-and-above the absence of negative body image (Linardon et al., 2022, 2023). It is no surprise, therefore, that research and research-informed practice on positive body image has experienced dramatic growth over the past decade (Andersen & Swami, 2021), opening opportunities for supporting individuals to flourish (Tylka, 2018, 2019).

In addition to broadening theoretical understanding of positive body image, researchers have also investigated the construct in a few diverse populations (Tiggemann, 2015; Swami, 2018). For example, qualitative research has explored characteristics of positive body image as experienced by, or manifested in, individuals with disabilities (e.g., with spinal cord injury; Bailey et al., 2015; Vinoski Thomas et al., 2019) and those who perceive their body/appearance to “deviate from social norms” (Alleva et al., 2023, p. 153). Similar to previous findings from the general population (Frisén & Holmqvist, 2010; Wood-Barcalow et al., 2010), positive body image in these populations was characterised by features such as body acceptance, appreciation for the body, and care for the body. However, unique characteristics were also described by individuals with disabilities: for example, Vinoski Thomas et al. (2019) proposed the *functional-aesthetic body*, which represents both the distinction and overlap between the internal (i.e., body functionality, or “the things my body does and does not do”) and external (i.e., appearance, or “how I look to myself and others”) perspectives of participants’ body image. Scholars have therefore proposed investigations of positive body image in historically marginalised communities as an important direction for research and, by implication, practice that aims to promote healthier body image for *all* individuals (Alleva et al., 2018; Tylka,

* Correspondence to: School of Psychology and Sport Science, Anglia Ruskin University, East Road, Cambridge, Cambridgeshire CB1 1PT, United Kingdom.
E-mail address: pl428@pgr.aru.ac.uk (P. Longhurst).

2019).

Research into positive body image has also referred to well-established theoretical frameworks that provide insight into bodily experiences, while also recognising wider socio-cultural influences – namely, *embodiment* (Menzel & Levine, 2011; Piran, 2016, 2019; Piran & Teall, 2012). Underpinned by Merleau-Ponty's (1962) definition of embodiment (i.e., “the lived experience of engagement of the body in the world”; Piran & Teall, 2012, p. 171), Piran conducted an extensive qualitative investigation into lived experiences of embodiment in Canadian girls and women and proposed *positive embodiment* to encompass five dimensions: body-self connection, agency, desire, self-attunement, and resisting objectification. Further, in the *developmental theory of embodiment*, Piran and Teall (2012) proposed that positive embodiment is cultivated in three domains: *physical freedom* (i.e., freedom in physical movement, safety and care for the body), *mental freedom* (i.e., resistance to race, gender and appearance-related discourse), and *social power* (i.e., freedom from prejudice and appearance-based social power, having empowering relationships and membership in equitable communities). Together, rather than solely focusing on one's evaluation of their appearance, such theory has provided a broader conceptualisation of positive bodily experiences by integrating the intersection of one's body and social location (Piran, 2015, 2016).

Despite these advances, existing body image theories still largely focus on normative bodies to the exclusion of non-normative or differing corporeal experiences (Landor et al., 2023; Vinoski Thomas et al., 2019). Therefore, researchers have argued for more in-depth examinations of positive body image in individuals with disabilities and/or those with body-related differences (e.g., chronic health conditions; Webb et al., 2015). In a similar vein, there have been calls for theory and practice in positive body image to move toward an affirmative (i.e., non/anti-pathologising) orientation toward difference (Rice et al., 2021; Vinoski Thomas et al., 2019). While this is an important step for current body image practice, there is also a need for researchers to conceptualise “difference” more broadly; that is, rather than focusing on *physical* difference(s), theoretical developments should also acknowledge and study populations with *cognitive* difference(s), such as autistic individuals¹ (Longhurst, 2023; Rice et al., 2021).

1.1. Emerging research into autism and body image

Autism is understood as a neurodevelopmental condition in which autistic people are said to be characterised by (i) differing social communication (e.g., non-speaking), and (ii) repetitive/restrictive behaviours, interests, and activities (American Psychiatric Association [APA], 2013). It is also understood that an important aspect of autism pertains to one's sensory experiences, such as hyper- or hypo-reactivity to sensory input and/or interest in the sensory aspects of one's environment (APA, 2013). It has been theorised that these unique cognitive experiences exhibited by autistic individuals are reflective of having a *dualistic* approach to mind-body relations (i.e., autistic individuals are more likely to describe the mind as being distinct from the body; Eigsti, 2013; Herbert & Pollatos, 2012). Specifically, some researchers have suggested that autistic people present differing interoception (i.e., the cognitive processing of internal physiological stimuli; Craig, 2002, DuBois et al., 2016, e.g., Mul et al., 2018), exteroception (i.e., stimuli originating outside of the body) and proprioception (i.e., the sensation of body/limb position and movement; e.g., Asada et al., 2018), as well as alexithymia (i.e., difficulties identifying and describing one's internal

¹ Identity-first language (i.e., autistic individual) and “autism” will be used as opposed to “with autism” and “autistic spectrum disorder”. While there are conflicting findings in the literature (e.g., Buijsman et al., 2023), empirical and anecdotal evidence largely suggest that members of the autism community perceive person-first language and the label “disorder” as stigmatising (see Botha et al., 2023).

emotional state(s); Preece et al., 2017; Sifneos, 1973; see also Hatfield et al., 2019; Longhurst & Swami, 2023). This is thought to influence autistic individuals' awareness of, and responding to, their bodily needs (e.g., hunger, thirst; Kinnaird et al., 2019; Sibeoni et al., 2022; Trevisan et al., 2021), resulting in negative perceptions toward the physical competency of their body (Bertilsson et al., 2018).

Preliminary evidence suggests that autistic individuals are at a greater risk for body image and eating concerns (e.g., Krumm et al., 2017; Westwood & Tchanturia, 2017). One line of evidence comes from studies with neurotypical (i.e., non-autistic) samples, showing that autistic traits (typically measured using the Autism Quotient; Baron-Cohen et al., 2001) in this population are associated with eating disorder pathology and facets of negative body image. For example, after controlling for age, gender, and body mass index (BMI), partial correlations indicate a significant positive relationship between autistic traits and body dissatisfaction (Mansour et al., 2016) and drive for muscularity (Galvin et al., 2022). Further, mediation analyses suggest that autistic traits negatively predict momentary body satisfaction (Krumm et al., 2017). These findings suggest that individuals with higher autistic trait scores may be more likely to negatively evaluate their body and appearance. Yet, the extant literature investigating body image is limited to neurotypical people (i.e., with AQ scores below 32) and has, therefore, yet to explicitly consider the autistic population (i.e., people who self-identify as being autistic).

Only a small body of qualitative research has explored autistic individuals' experiences and perceptions of their bodies (for review, see Longhurst, 2023). In previous studies (Brede et al., 2020; Healy et al., 2021), autistic individuals described experiencing aspects of negative body image, such as body dissatisfaction and drive for thinness. Participants also associated their body image concerns with “traditional” risk factors, such as exposure to harmful appearance-related messages and prescriptive appearance ideals. At the same time, however, these studies have also suggested that autistic individuals have some unique experiences, such as sensory difficulties (e.g., hypervigilance to bodily sensations) and feeling socially isolated or “different”. In addition, they may engage in negative body talk as part of “masking” (i.e., conscious and/or unconscious suppression of natural autistic characteristics and behaviours to appear as neurotypical or non-autistic; Hull et al., 2017). Furthermore, autistic women described being affected by harmful appearance-related messages, but the negative outcomes of these messages (e.g., thin-ideal internalisation) were better explained by differing social information processing (e.g., interpreting messages literally or without flexibility; Brede et al., 2020). This research provides a starting point for understanding body image in autistic individuals, but the extant literature is limited to clinical contexts (e.g., eating disorders, weight management) and/or focuses on the negative dimension of body image.

Although positive body image has been studied in some diverse communities (e.g., Alleva et al., 2023; Bailey et al., 2015; Tiggemann, 2015; Vinoski Thomas et al., 2019), research has yet to investigate experiences of positive body image in autistic individuals. This is particularly important given that the body image experiences of autistic individuals are likely to have substantial impacts on their quality of life, including perceptions of physical health and well-being (Mason et al., 2018), eating behaviours (Nimbley et al., 2023), and encounters with healthcare professionals (Babb et al., 2022; Healy et al., 2021; Jachyra et al., 2019). Research has also found existing interventions, for both general health and eating disorders, often cause iatrogenic harm to individuals in the autistic population due to a limited theoretical understanding of body image-related experiences in current research and practice (see Babb et al., 2022; Brede et al., 2022; Camm-Crosbie et al., 2019). As such, the current lack of knowledge and understanding poses a challenge for theoretical accounts of positive body image: while it is possible that the same characteristics of positive body image may apply to autistic individuals, it is also possible that there are aspects of positive body image that may be uniquely experienced in this population.

For example, a recent meta-synthesis (Sibeoni et al., 2022) of sensory experiences in autistic individuals found that participants associated their sensory differences (e.g., hypersensitivity to bodily sensations) with positive bodily experiences, akin to both positive body image and embodiment (e.g., feeling joy and pleasure in the body while stimming [i.e., repetitive self-stimulatory movement and/or vocalisation]). Similarly, Jones et al. (2009) found autistic individuals derive enjoyment from their bodily experiences, particularly when they employed adaptive strategies, such as paying attention to and accommodating their own (sensory) needs. Importantly, autistic individuals described that this, in turn, led to greater sense of acceptance toward the self and their “autistic” body. While positive body image was not an explicit focus, these findings suggest it may manifest differently among autistic individuals.

1.2. The present study

Given the above, there is a need for a fuller understanding of experiences of positive body image in autistic individuals. More specifically, developing an understanding of positive body image in autistic individuals requires gaining a more holistic understanding that captures the uniqueness, complexity, and multidimensionality of body image experiences in this population. Doing so would contribute to building a more cohesive body of theoretical and empirical research and could support the development of future interventions that more effectively promote healthier body image for autistic individuals (e.g., Koch et al., 2016). As such, the aim of this study was to develop a grounded theory of positive body image in autistic adults from the United Kingdom.

To do so, we adopted a qualitative framework to generate an in-depth understanding of complex phenomena, centred on the lived experiences of autistic individuals (Braun & Clark, 2013; Charmaz, 2006). Additionally, with the autistic community being highly variable in terms of identity and experience, we also used photo-elicitation to interview participants collaboratively. This method enables difficult-to-articulate experiences to be shared by using photographs and talking about them with a researcher (Coussens et al., 2020). In this view, photo-elicitation supports participants to express complex or silent experiences (e.g., Han & Oliffe, 2016; Harper, 1986), enabling rich dialogue with people from marginalised communities (e.g., Bailey et al., 2016; Dassah et al., 2017), including autistic individuals (Lam et al., 2020). We investigated the following research questions: (1) How do autistic individuals experience their body image?; (2) In what way does positive body image manifest in autistic individuals?; and (3) What characteristics, if any, of positive body image are unique to autistic individuals?

2. Method

2.1. Design

Grounded theory (GT) was chosen as a suitable research methodology for the present study due to its usefulness in explaining lived phenomena and guiding research that has otherwise received limited empirical and conceptual analysis (Corbin and Strauss, 2008). Furthermore, GT methodology aims to generate a substantive theory that is “grounded” in the data and has been developed through a systematic, rigorous analytical process (Glaser & Strauss, 1967). In this case, this methodology was used to develop a grounded theory containing a categorical framework which provides a comprehensive understanding of autistic individuals’ body image experiences. More specifically, constructivist grounded theory (CGT) was employed in this study (Charmaz, 2006). While there are varying approaches to GT based on differing epistemological and ontological perspectives (e.g., Corbin & Strauss, 2008; Glaser & Strauss, 1967), CGT emphasises the role of the researcher-participant relationship for co-constructing theory that is underpinned by the meaning of participants’ experiences (Charmaz, 2006). Furthermore, CGT takes a reflexive stance toward the research

process and explicitly assumes an interpretative worldview. Specifically, it assumes a relativist ontology and subjective epistemology; that is, multiple realities exist, and knowledge is co-created and influenced by one’s social environment (Charmaz, 2006; Denzin & Lincoln, 2005). Taken together, CGT was considered most appropriate, as the aim of this study was to explore how autistic individuals define and experience positive body image in relation to their lived experiences.

One-to-one interviews were considered suitable for this study, as they focus attention on the participant in an individual capacity (Patton, 2002), which accords with recommendations for conducting research in the autistic community (Nicolaidis et al., 2019). Specifically, individual interviews – in comparison to focus groups – have greater flexibility to accommodate individual needs (e.g., sensory and communicative concerns) and participant autonomy (e.g., speaking freely without the risk of experiencing anxieties relating to disclosing personal information). Together, this is likely to yield data with depth and richness (Patton, 2002). Furthermore, with this being a previously unexplored area of research, there is a need to explore and elaborate on lived experience. Therefore, in line with Charmaz’s (2006) recommendations, semi-structured interviews were chosen because of their exploratory, flexible nature. Semi-structured interviews allow for emerging and/or unanticipated topics to be explored with greater depth, while also retaining consistency by following a schedule (Charmaz, 2006). Lastly, the flexibility permitted in semi-structured interviews is likely to accommodate the heterogenic nature of the autistic community; that is, it may better support a person-centred approach which caters to individual needs (Pickard et al., 2021).

2.2. Participants and sample size

Theoretical sampling was used in the present study. Originating in GT, theoretical sampling refers to an iterative process of collecting and analysing qualitative data to develop theory that is rooted by the “maturity” of core theoretical categories (Charmaz, 2006; Glaser and Strauss, 1967). In other words, rather than primarily focusing on code saturation (i.e., when no new codes are identified), sampling was informed by *meaning saturation* (i.e., when no new insight, nuance, or issues are identified; Hennink et al., 2016). Herein, meaning saturation was reached after 20 participants (age $M = 30.63$, $SD = 10.62$, range = 18–53 years) with differing experiences and/or perspectives and variations in sociodemographic backgrounds participated in the study (see Table 1 for an overview of participants’ individual characteristics).

2.3. Positionality and reflexivity

The present study acknowledges that the researchers’ insider and outsider positions – including lived experiences and academic backgrounds – may have informed the research process of this study (cf. Charmaz, 2006). This study was conducted by a team of researchers of differing backgrounds in terms of socio-demographic characteristics, body image expertise, and experience in the utilisation of research methods. All members of the research team collaborated on the research process, including the development of the study design, interview schedule, and over-arching concepts of the data. Below, the relevant characteristics of each researcher are described.

The lead author is a white, thin, autistic, cis-gender woman in her early 30 s, who was born and lives in the United Kingdom. She received her autism diagnosis (i.e., high-functioning autism) in early childhood and has no physical disabilities. While she primarily received a mainstream education, she attended a special educational needs school until the age of seven years and received assistance up until graduating from her undergraduate degree (aged 22 years). She has lived experience of having body and eating concerns (i.e., anorexia nervosa). Her academic interests are underpinned by theories within social and feminist psychology, particularly those within the body image and eating disorder literature, and critical disability theory. As such, her motivations for this

Table 1
Participants self-reported demographic characteristics.

Pseudonym	Age	Gender	Race/ethnicity	Level of education	BMI	Age of Dx
1. Aaron	26	Male	White/White-British	A-levels	19.4	26
2. Rebecca	34	Agender	White/White-British	Undergraduate	–	7
3. Kiri	52	Non-binary	White/White-British	Other: High-school (US)	–	47
4. Amelia	35	Non-binary	White/White-British	Postgraduate	29.8	34
5. Scarlett	18	Female	White/White-British	A-levels	27.6	16
6. Andy	53	Male	White/White-British	A-levels	–	–
7. Ottie	20	Non-binary	White/White-British	A-levels	17.7	16
8. Ruby	21	Female	Black/Black British/ African/Caribbean	Prefer not to say	24.5	18
9. Eleanor	23	Female	White/White-British	Undergraduate	20.7	22
10. Kieran	26	Male	White/White-British	Undergraduate	–	11
11. Connor	35	Male	White/White-British	A-levels	29.7	22
12. Participant 12*	–	Female	Asian/British Asian	Postgraduate	19.9	28
13. Ruth	45	Female	Mixed or multiple ethnic groups	Postgraduate	21.7	44
14. Lewis	24	Male	White/White-British	Undergraduate	33.5	23
15. Theo	40	Non-binary	Prefer not to say	A-levels	20.1	37
16. Lucy	28	Female	White/White-British	Postgraduate	20.4	21
17. David	32	Male	White/White-British	A-levels	22.2	3–4
18. Wayne	29	Male	White/White-British	Undergraduate	34.3	25
19. Stacey	20	Female	White/White-British	A-levels	41.2	8–9
20. Nick	21	Male	White/White-British	A-levels	–	2–3

* This pseudonym was requested by the participant

study, as well as the research design, implementation of interviews, and analytic process, were informed by Charlton's (1998) *Nothing About Us Without Us*. However, she recognises that it is not her duty nor place to speak for the wider autistic community. Nevertheless, central to the neurodiversity paradigm, she positions autism as a *difference* that should be accepted and supported, as opposed to *disorder*, by prioritising the use of alternative neuro-affirming language (e.g., identity-first language; Botha et al., 2023; see Bottini et al., 2023 for a review). With the assistance of the research team, she developed and conducted this study and transcribed and analysed all of the data.

The second author is a white, heterosexual, neurotypical, cis-gender woman in her 40 s, and was born and lives in the United Kingdom. She has never experienced any body-related or eating concerns. She is an Associate Professor of cognitive neuroscience at a university in the United Kingdom and primarily uses quantitative methods. Her research focuses on how the perception of the body underlies the experience of self.

The third author is a neurotypical, white, bisexual, cis-gender woman in her early 30 s. She was born in the United Kingdom and currently lives there with her white, cis-gender husband, and they have a pre-adolescent child together. She experienced negative body image and an eating disorder from her childhood to her early 20 s but has now developed a predominantly positive body image and intuitive eating style. She trained as a professional dancer before completing her degree in Psychology. She is currently a postdoctoral research fellow with varied research interests within the field of embodiment research, which include body image, interoception, psychometrics, and chronic pain.

The final author is a neurotypical, cisgender, heterosexual man in his early forties. He was born in Malaysia and retains Malaysian citizenship, and lives in the United Kingdom, where he has permanent residency. He identifies as being of racialised minority status both in Malaysia and the United Kingdom. He is married to a cisgender woman and is a father to two pre-adolescent children. He is a Professor of Social Psychology at a university in the United Kingdom and holds an adjunct professorship at a university in Malaysia. His research specialisms include body image (particularly as understood through a cross-cultural lens), psychometrics, and mental health literacy. In this present study, he supported the analysis of this research (see Section 2.7).

2.4. Procedures

2.4.1. Community involvement

Following recommended practice for conducting autism research (e.

g., Nicolaidis et al., 2019), community involvement was sought to incorporate autistic voices in the design of the current study, to ensure its accessibility and acceptability for autistic individuals. Four autistic adult members (3 women, 1 man) of the Autistica Research Network were consulted on the procedures and materials (i.e., consent form, participant information sheet, interview guide) of the study. Prior to interviews, these respondents were provided with all materials and an outline of the study design for review. One-to-one interviews using videoconferencing software were carried out and lasted approximately 60 min. All autistic adult members received financial compensation on an hourly basis, in line with national recommendations (see NIHR, 2023). Amendments were made to the consent form, photo-elicitation instruction guide, and the interview schedule based on the feedback that was received. Specifically, segments of written text were placed in bold and/or underlined script to emphasise their importance, and examples were included in the interview schedule to provide contextual information. No modifications to the study design were deemed necessary.

2.4.2. Recruitment

Recruitment was conducted using theoretical sampling to obtain a sample that varied in terms of demographic backgrounds (e.g., age, gender identity, educational attainment, body type/size) and autistic characteristics (e.g., age of diagnosis). To ensure that the emerging construct could be similarly applied to those with a range of experiences, recruitment continued using theoretical sampling (Charmaz, 2006). Because of the limited prior research in this area, flexible inclusion criteria were utilised. Participants were eligible if they met the following inclusion criteria: (i) aged 18 years and above; (ii) resident in the United Kingdom; and (iii) received a formal clinical diagnosis of autism (e.g., Autism Spectrum Condition, Asperger's Syndrome, Pervasive Developmental Disorder [PDD-NOS])². The sample was required to not have a learning disability, as this requires a more extensive recruitment process

² A range of autism diagnoses was included in the recruitment strategy to reflect the diagnoses of autism within the Diagnostic and Statistical Manual's fourth (DSM-IV) and fifth (DSM-5) editions. In the DSM-IV, autism fell under the category of "pervasive developmental disorders", which included Autistic Disorder, Asperger's Syndrome, and Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS) (APA, 1994). The DSM-5 combined these diagnoses into one broad diagnosis – autism spectrum disorder (preferably referred to as autism spectrum condition in the autistic community; APA, 2013; Botha et al., 2023).

(e.g., allowing multiple meetings with potential participants and carers, having third-party assistance) and ethical considerations (e.g., obtaining informed consent). Participants were, therefore, excluded if they had not received or followed mainstream schooling/curriculum.

2.4.3. Study procedures

Once ethics approval was received from the School Research Ethics Panel (approval code: ETH2223–2245), the study was advertised using online channels, including social media and autism-related support networks and forums. This recruitment strategy accords with existing research guidelines (e.g., Nicolaidis et al., 2019) and is viewed as a favourable and effective recruitment strategy by the autistic community (Haas et al., 2016). Participants were invited to express their interest in taking part in a study entitled, “Help us learn about body image in autistic individuals”, by completing a brief online screening survey, hosted on Qualtrics. The survey comprised three sections: first, participants were asked to complete items regarding their eligibility (e.g., age, location of residency, autism diagnosis status). Participants who did not meet the inclusion criteria were exited from the survey. Next, to recruit an authentic sample of autistic adults, participants were asked to validate their autism diagnosis by answering one of the following questions: (1) What was the date that you received the diagnosis?; (2) How old were you when you received your diagnosis?; (3) Where did you receive your diagnosis?; or (4) What was the name of the professional who assessed/diagnosed you? This strategy was chosen as it supports accessibility while upholding data quality and integrity (for practice recommendations, see Pellicano et al., 2023). More specifically, to avoid recruiting fraudulent participants (i.e., posing as autistic people), we gave participants the option of what information they wished to provide regarding their autism status, rather than requesting formal verification (e.g., clinician letter) and/or completing screening tools (e.g., the AQ). Participants were then asked to complete a demographic survey (see Section 2.5) and an online consent form. Participants who provided digital informed consent were then contacted to arrange a time and date for interview.

2.4.4. Interviews

Interviews were conducted between December 2022 and March 2023. Participants were provided with an information sheet (both online and via email) containing the aims of the research and indicating that interviews would be audio-recorded. Participants were informed that interviews would be anonymised during transcription and were provided with a debriefing sheet following the interview. To account for preferences and needs, as well as for the geographic dispersal of participants across the United Kingdom, participants were given the option to carry out their interview in-person or using videoconferencing software. All participants requested to have their interview online using videoconference. All participants provided digital and verbal consent and received a £ 25 retail voucher for taking part in the study. Verbatim transcription was completed manually, and transcripts were double-checked against audio recordings for accuracy. To maintain confidentiality, the following steps were taken: (i) all identifying information (e.g., consent forms, audio recordings) were kept on a secure drive on institutional computer systems and were encrypted; (ii) transcripts were labelled with the participant’s pseudonym on a secure drive; and (iii) audio-recordings were permanently deleted following analysis. Interviews lasted between 37 and 91 min ($M = 69.35$, $SD = 14.60$).

2.5. Materials

2.5.1. Demographic information

A brief online survey was used to collect demographic information. Participants were asked to self-report their age, gender identity, racialised status, and level of education. Data for self-reported height and weight were collected to compute BMI (kg/m^2) as a means of capturing body/size diversity of the sample. Participants’ self-reported age of

autism diagnosis was collected, as this is known to potentially impact one’s lived experiences and perceptions regarding their autistic identity and the body (Crane et al., 2018; Leedham et al., 2019; Lupindo et al., 2022).

2.5.2. Photo-elicitation

A semi-structured, participant-driven approach to photo-elicitation was chosen to create a collaborative environment for exploring participants’ lived phenomena (Bates et al., 2017; Harper, 1986). Specifically, participants were provided an instruction guide approximately two weeks prior to their scheduled interview. This guide consisted of questions from the interview schedule and asked participants to actively create and/or select photos (pre-existing and self-produced) they deemed relevant and/or represented the phenomenon of interest. This was to promote participant responses that best reflect who they are as a person (e.g., interests, values) and their life experiences, including those in day-to-day life. The guide then provided instructions on how to share these images with the researcher. Participants were made aware that creating and/or sharing images was not a requirement for taking part in the study; instead, photos were used as a communicative tool for guiding and/or eliciting discussion. To this end, images shared by participants were not collected as data. This decision was informed by protecting their confidentiality and privacy, and for copyright reasons.

2.5.3. Interview guide

Interviews followed a semi-structured guide (see Appendix 1). The guide was constructed in accordance with Charmaz’s (2006) recommendations for collecting data. The interview guide was further developed based upon existing literature in the field of positive body image (e.g., Bailey et al., 2015; Frisén & Holmqvist, 2010; Wood-Barcalow et al., 2010). The following topics were chosen: (i) thoughts and feelings toward the physical body and appearance, (ii) the role of influential socio-cultural factors (e.g., media, appearance ideals), (iii) the relationship between their autism and the body, (iv) positive thoughts and feelings toward the body (e.g., connection, respect, and care); and (iv) body image-related advice for other autistic people and/or society-at-large. A pilot interview was conducted with an autistic man (aged 30 years, British white, postgraduate education) to identify any potential concerns regarding the research design and tools. Given the exploratory aim of this pilot interview, data were not collected nor analysed. This pilot interview lasted approximately 60 min and no modifications were deemed necessary.

2.6. Data coding and analysis

Following Charmaz’s CGT methodological framework, data collection and analysis were conducted iteratively. The first, initial step was transcribing interviews verbatim and manually after each interview. Any field notes and/or non-verbal information during interviews were embedded into the transcripts. Charmaz (2006) outlines three main coding processes: initial coding, focused coding, and axial coding. Initial coding involved line-by-line coding where provisional codes (i.e., descriptive words or phrases) were created to capture small units of participant’s accounts (i.e., phrases). Doing so enabled the first author to understand participants’ experiences and perspectives, which in turn led to identifying initial concepts that were grounded in the data (Charmaz & Thornberg, 2021). In this stage, codes were continuously compared across transcripts to identify commonalities and/or irregularities in experiences. This ongoing review of the transcripts was also carried out for quality assurance, consistent with the theoretical sampling principle (Corbin & Strauss, 2008). Next, focused coding was used: this is a more conceptual stage, and codes become more directed and selective, are completed iteratively, and are continuously compared to new incoming data. Focused coding was used to help generate tentative categories, which were continuously compared with the data to ensure they reflected the data, across participants. Axial coding was the final phase

and includes defining categories and subcategories and re-evaluating the initial codes to ensure coherence (Charmaz, 2006). Lastly, diagrams were created to map out relations between categories and subcategories, illustrating the resulted grounded theory of positive body image in autistic individuals. NVivo version 2.0 (released 2020) was used throughout the entirety of the analytical process.

Grounded theorists suggest it is important to keep a memo of information to record and organise conceptual understanding, to facilitate analytic examination, and for reflexivity (e.g., writing down one’s own thoughts, questions; Charmaz, 2006). Memo writing was, therefore, carried out throughout the data analysis. Memos consisted of capturing the researchers’ thoughts and ideas surrounding preliminary codes, methodological questions, and the similarities/disparities between concepts in the data.

2.7. Methodological rigour

To maintain credibility, authenticity, and trustworthiness of the data, Lincoln and Guba’s (1986) and Charmaz and Thornberg’s (2021) recommendations were followed. To ensure the credibility of the data, the first author collected data iteratively and made systematic comparisons of concepts identified in the participants’ accounts to develop a thorough analysis. Further, the first author engaged in systematic and reflexive analysis of participants’ accounts, which involved reflecting on her own epistemological position(s) and acknowledging that her previous knowledge and lived experiences impacts their interpretation of the data. To maintain authenticity, participants’ own words were provided as quotations in the results. Both originality and usefulness were demonstrated in the form of new phenomenological insight into positive body image in the adult autistic population, which should serve to inform existing theory and practice. Finally, the first author used multiple coders to ensure trustworthiness of the data and to be able to analyse the data with a constructivist approach (i.e., to ‘step back’ from the data and remain guided by participants’ experiences). This involved the final author acting as the second coder, who was provided a copy of the codebook and 10 randomly selected transcripts (uncoded). The second coder and the first author agreed on all codes in the codebook,

with one additional code being recommended by the second coder. Coders met for debriefings during analysis and theorising was discussed and challenged until they agreed on the final categories and subcategories.

3. Results

3.1. Overview

When all accounts related to participants’ experiences were coded, a grounded theory was developed around the core category of positive body image in autistic individuals. Below, we outline six themes that reflect their positive body image across its physical, mental, and social aspects: body connection, body acceptance, appreciating body functionality and neurodivergent strengths, having a protective filter for the body, taking care of the body, and body and appearance neutrality. Each theme differs in stability (i.e., fluctuating according to internal and external factors), but also reciprocal to one another (e.g., body connection promotes taking care of the body). Therefore, while these themes are presented individually, they should also be seen as fluid and interconnected (see Fig. 1). Several of the following sections address both negative and positive bodily experiences to allow a more holistic understanding of the full range of experiences, which are reflected by participants’ accounts.

3.2. Body connection

A salient experience among all participants was the perceived separation between the mind and body. This pertained to both the external and internal aspects of the body and was, therefore, described by participants in two ways: first, having a limited awareness of and/or identification with the external body (“I just don’t have an awareness of what I look like”, Participant 12); and second, having variances in sensory sensitivities (e.g., hypo- or hyper-sensitivity to bodily sensations) and interoceptive awareness. Thus, the way in which participants experienced their body image pertained to the aesthetics (i.e., what the body looks like), but also the sensations (i.e., what the body feels like) of

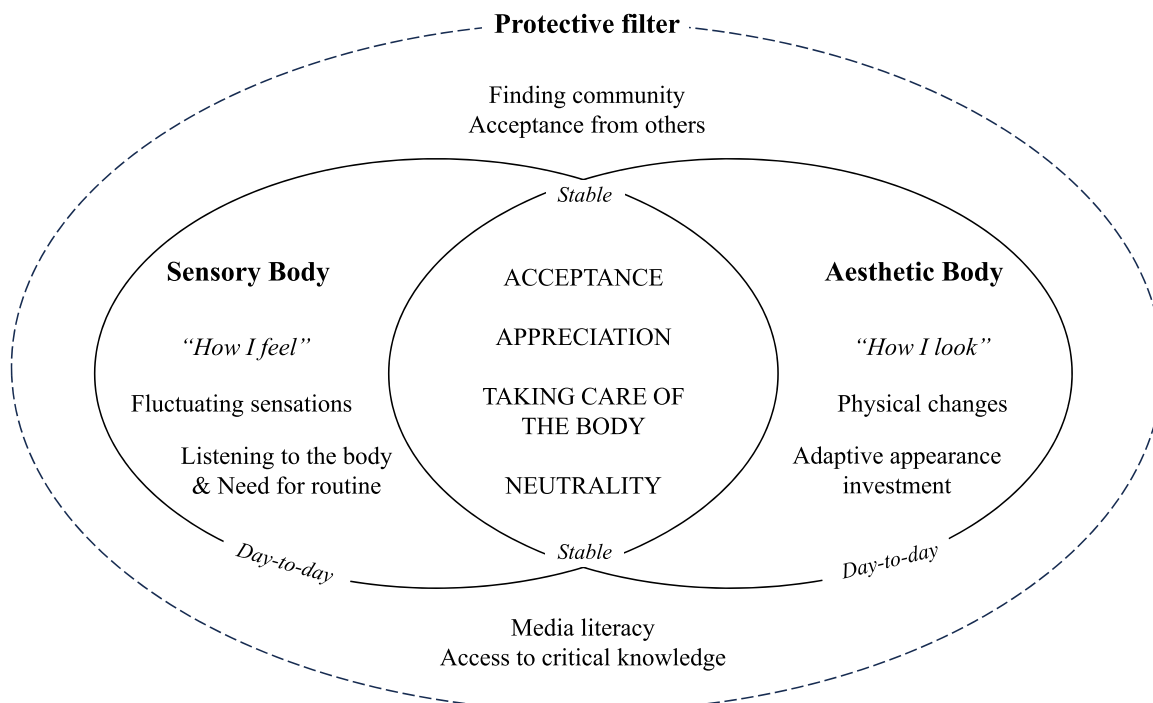


Fig. 1. Conceptual model from findings, adapted from Vinoski Thomas et al.’s (2019) functional-aesthetic theory of body image.

the body. For example, Lucy said:

The experience in my body is predominantly sensory based of certain skin folds or how certain things touch, and that wasn't ever based on the media says you shouldn't have things that touch. It was more like, God, I really hate what that *feels* like.

Nevertheless, all participants described simultaneously experiencing connection with the body – that is, the *self* and the *body* as one entity – suggesting body connection to be a spectrum-like experience. Further, while they attributed body disconnection to being autistic, they described connecting to their body in ways which are specific to their autistic experience(s). When experienced fully and positively, participants described body connection in three ways.

3.2.1. Understanding one's body

Body connection was realised through understanding ones' body – Amelia said: “[it's] knowing that, quite a lot of autistics, we have different bodies”. That is, understanding *why* they experience the world the way they do was pivotal to becoming more connected to their “autistic” body, and was described as an ongoing process. As Connor learned more about his sensory differences, he then “spent time really like analysing; and inevitably, that reflects back on me. You start thinking about yourself”. Aaron said having this greater understanding helped him “connect with my body [as] I can understand why it does what it does”. While this level of understanding developed with age, for many, this was underpinned by receiving their diagnosis and/or accessing affirmative information about autism. Together, this helped them learn how to inhabit the body *in their own way*:

There's a kind of acceptance that this is how I seem to go about the world, and how my body kind of behaves, and how my head works (Kieran).

3.2.2. Connecting with the body through physicality

A fundamental aspect of feeling connected to one's body was through physical experiences. Specifically, most participants described engaging in embodying movement, such as running, hiking, weightlifting, and dancing, which shaped their feelings and/or experiences of the ‘body-as-it-is-lived’ (Merleau-Ponty, 1962). While hiking, Lucy said:

[This is] the moment I feel most connected in my body – not like in a pilot seat, not my head a little bit closer to my body – fully immersed in my body. I don't think anything else; it feels natural.

However, Kiri said it was important to “listen to your body in terms of moving in ways that feel pleasurable, rather than forcing your body to do exercise”. Indeed, some participants alternatively emphasised stimulatory movement (i.e., *stimming*). Connor categorised *stimming* as either physical (“when I click my fingers, or I like throw things away out of my hand”) or verbal (i.e., “are just phrases that I'll repeat”). Rachel would enjoy “pushing on things and feeling it pushing back, it's all about tension. Just the feeling of using your body”. Interestingly, when discussing how this made Rachel feel in their body, they said “it's tactile and shape [...] you just see lines and force and the locks of shape and of colour and that is beautiful”. Kiri also highlighted the utility of combining multiple senses and/or ‘modes’ of stimulation, such as music and dance: “techno, and loads of electronic music, that kind of extremely repetitive music, and repetitive dancing was just something went really nicely together with autism”.

3.2.3. Developing and expressing body-related agency.

Social environments were commonly perceived to restrict or block participants' sense of autonomy, with the body viewed by an oppressive – rather than objective – gaze. Thus, many participants described that, rather than wanting to look good, they wanted to look right. Connor described this as wanting “to be what other people wanted me to be, and part of that was physically present in a way that caused kind of the least attention”. Furthermore, many would copy the appearance of others (e.

g., clothing). Hence, in addition to their appearance, participants felt restricted in expressing other important aspects of themselves, including their interests and values, due to needing to hide, or at least suppress, how their body naturally moves or ‘behaves’. Kieran said:

If I was out and about, there might be some kind of almost a self-censorship [...] for example, I may not flap my hands in public [...] people really kind of single you out and, of course, that can be uncomfortable.

Yet, some participants described becoming aware of their restricted agency and were, therefore, motivated to express themselves more freely. This was a process that occurred over time and involved dismantling internalised stigma. Rather than attending to other people's experiences of their body, Eleanor began to honour her own needs:

I can feel the beneficial, nice feeling of *stimming*; the way that that regulates me, and that it's an option I have to self-soothe, makes me feel positively about myself and my body because it's quite a useful tool to have.

Some participants also described expressing their identity without concern of external judgement. For many, clothing and/or physical appearance was used to express this to the world. As Kiri said: “Clothing is a language and physicality is a language [...] I have a very specific aesthetic that I would like to put forward in this world [...] so your clothes should tell a story of who you are what you do what you're into”. Indeed, clothing supported them in communicating their inner language, as expressing themselves was often difficult. Lucy said: “how I dress, it clarifies my identity to other people, so it eases any bridges of communication in the respect”. By having agency over their appearance, many participants described leaning more into their (sensory) needs by wearing what made them feel more comfortable – both physically and mentally. This included loose or ‘floppy’ clothing, which as Amelia said provides “a sensory cocoon” for the body.

3.3. Body acceptance

Body acceptance was expressed by all participants as allowing the body to *just be*, pertaining to both external (aesthetic) and internal (sensory) aspects. As Lucy said: “I feel used to my body. I know what to expect from it, and what it feels like, and how to take care of it”. However, Lucy initially described having difficulties with navigating bodily changes, particularly during puberty. This was a common experience among participants, as Andy described: “you hit puberty and my body started not being my body, and things were appearing, and things were happening that I had no control over”. Lucy said these changes were often confounded by negative emotional states, namely confusion and frustration, resulting in a loss of comfort in the body:

I was so frustrated because I didn't understand what hips were. All of a sudden, pants started to sit differently, and I was just like, what the heck? [...] instead of being comfortable of taking up space, I was rigid and very stiff.

While this eased as they grew older, all participants continued to have difficulties with experiencing changes within the body. For example, Andy said “that is so incredibly autistic: the being able to have something to eat and feel it sitting or growing”. However, participants expressed that accepting the body was an important way to respond to these changes. Aaron said:

Any change can be very difficult for autistic people and body changes are not an exception to that, whether it would functionality, whether it'd be how you look [...] For me, it's learning to accept who we are and learning to accept that [the body] will change over time as well.

When asked what supported him in feeling acceptance, he emphasised that seeing the body from a “logical perspective, it then becomes easy to accept it”. More specifically, some participants described this

approach as understanding the body's natural processes; as Amelia said, "you're just like, oh, some of this just happens [weight set-point] because of your genetics and the make-up of your body". Most participants also attributed their acceptance to growing older (and becoming wiser), as David said: "I'm starting to care less now than I did years ago and start to accept that this is me. Everything you see before you is me". Importantly, some participants emphasised that accepting the body was more attainable than having "love and appreciation" for the body. Lucy said:

The idea that you have to love yourself every step of the way, every day, every moment and feel like the personification of, you know, whatever Pinterest Instagram page of whatever influencer you wanna be or whatever, it's just not realistic.

3.3.1. Finding a (neuro) affirming community and body acceptance from others

All participants commonly perceived their body as problematic and as an unsafe site across socio-cultural contexts. Specifically, many participants recounted receiving negative and/or stigmatising comments regarding their autism and, in more severe cases, harassment and physical abuse. Therefore, Eleanor said, "being autistic means you're often on fairly high alert or doing a lot of analysing of situations that you're in. That, in turn, leads to anxiety". Additionally, most participants described having difficulties with close relationships (e.g., family members) who perpetuated diet culture and/or harmful body-related comments. Given this, many participants expressed the importance of accessing 'safe' (physical and/or online) environments where they experience unconditional acceptance from others (i.e., accepting their body regardless of its appearance and 'non-(neuro)normativity'). For example, Kieran recounted entering "a space where it was predominantly filled with neurodivergent people, there was a kind of wave of acceptance and seeing that, for once, you're not the odd one out". Most participants felt that these experiences manifested and protected their capacity to be accepting of not only their appearance, but also their autistic body, by reminding them of their inherent worth *exactly* as they are. As Wayne said:

The more I found people who are like me, similar values and like the same things, who kind of understood me – that mutual support and friendship brings out a sense of worth and value. I think if you have a sense of worth and value about yourself, then you're less likely to have a really pessimistic and quite harsh view of how you are and what you look like.

3.4. Appreciating body functionality and neurodivergent strengths

All participants expressed appreciation and gratitude for the functionality of the body. For example, Ruth placed greater importance on what her body does than on the aesthetics of her body: "I'm much less bothered about how it looks and much more bothered about can I move easily? Can I do all the things that I want to do?". Similarly, when asked what they like most about their body, Kiri said: "I like its endurance, that's what I like best about it". Attending to the functionality of the body was most supported by engaging in physical activities. For example, when talking about his engagement in football, David said:

I'll be playing goal and I make a save, I see the reaction from my teammates and the opposition – that gasp like, wow, what a save! – that makes me feel enlightened. That makes me feel kind of accomplished because that's my own doing. That's my own force from my own body.

Focusing on the functionality of the body was thought to result in improved self-esteem and self-confidence. Interestingly, Lucy extended this further and said "[even] if I feel very socially awkward, I know that I can go and climb a mountain and feel ok doing that. It gives me a sense

of competence". As such, many participants associated the functionality of the body with their autism. Aaron attributed their emphasis for body functionality with being logically and/or mechanically minded. He said:

My autism affects my brain because it's always very logical and quite unemotional about things [...] I look at things from a very logical mechanical perspective and that includes my body and how it works how it functions how everything about it works.

Many participants expressed appreciation and gratitude that stemmed from an intellectual perspective. For example, when asked what they like most about their body, Scarlett expressed "what I like most is how fascinating it [the body] can do, like, amazing things". Similarly, when discussing the functionality of their body, some participants broadened this concept toward their intellectual ability. For example, Amelia attributed their weightlifting skills to how their mind works: "I've been able to learn weightlifting which is sometimes quite technical [...] I like that my brain tells my body and can learn this stuff". Some participants also expressed gratitude for their ability to 'think faster than other people', puzzle solve, and their ability to understand and withhold complex information. Thus, in addition to physical activities, Lewis said:

I suppose there are two sorts of exercise a person can take part in: that's physical exercise or sort of mental exercise. I am far more interested in furthering my knowledge and my thinking processes and all that sort of thing, rather how much weight I can lift.

Hence, many participants described the importance of also engaging in creative endeavours that help them acknowledge what the body can achieve. Participants participated in reading, writing (e.g., poetry, research), and creating art (e.g., making clothes, pottery, life drawing). Overall, when asked how focusing on their intellectual abilities made them feel, Amelia said "I've always prided on that". Aaron, therefore, expressed that while autistic people could focus on better connecting with the physical body, it is also important for them to connect with their mind.

3.5. Having a protective filter for the body

All participants expressed having an awareness of appearance-related pressures, including those related to thin and muscular ideals. For example, Aaron said: "for men, it's more the sort of muscular athletic body; but for women, it varies depending on which day of the week it is". All participants held negative views towards media (i.e., television, advertising, social media) and appearance-focused messages. Participants, therefore, described filtering social information in a body protective manner, which both manifested and maintained their positive body image. Filtering consisted of three primary strategies.

3.5.1. Critiquing appearance ideals and ideal-imagery

All participants were highly critical of (current) beauty ideals. They remarked that ideal-imagery largely depicts fantasy, rather than reality, as Rachel said: "unrealistic is too mild of a word for what it is [...] nearly everything you see is touched up". Many participants also commented that current appearance ideals lack representation of diverse bodies. Together, this motivated Aaron to take action by changing current discourse: "I try and portray it in the complete opposite way now because I can see the damage it's done [...] it's that little bit of change we can hopefully see in our future". Interestingly, Lucy attributed this mentality to being autistic:

It's often talked about in the autistic community that there's kind of predilection of a desire for truthfulness and for authenticity, and that usually manifests in autistic communities as unrelenting demands for justice and equity.

3.5.2. Knowledge is power

Most participants reported growing up and/or being surrounded by

others who held negative appearance-related attitudes, particularly towards weight and diet. To counteract this, some participants sought knowledge of societal norms regarding appearance and/or weight in various ways (e.g., online forums, academic literature). For example, Amelia used social media and said: “I follow, as well comment on, more the health at every size movement”. Similarly, Lucy “learnt a lot about weight stigma [...] as well as beauty culture and feminism in terms of why women’s bodies are considered a symbol”. As such, Theo expressed the importance of feminist and/or gender sensualist literature, as “that made me more comfortable with being male, because there’s so many more ways of [being] male than the stereotypical one”. Aaron, however, took a more hands-on approach by “talking to others and understanding how it [ideals] affects people from different backgrounds, different body sizes”. Together, these strategies taught participants to be critical of and challenge societal norms and/or pressures which, in turn, introduced them to alternative ways of experiencing their body.

3.5.3. Disengaging from appearance-related pressures

Several participants noted consciously reducing their engagement with sources of appearance-related pressures (e.g., social media) as being part of their protective filter. David said, “I’ve been trying to limit myself because, again, it all boils down to looking at other people”. However, most participants felt that being autistic meant having an innate ability to disengage and not conform to appearance-related pressures: “not conforming to things is something I’m very good at” (Kiri). Participants were, instead, more motivated to engage in other meaningful activities such as their hobbies (e.g., reading, watching films, creating art) or “special interests” (i.e., highly focused interest in a particular topic, object, activity). For example, Ottilie said:

I was just very involved with my own special interests and that became a very insular thing [...] as a result, I wasn’t aware of the trends both in media, in appearances, in like make up trends. I just wasn’t aware of it whatsoever.

Most participants also attributed their disengagement with “being on the periphery of society”. Kieran saw this as positive a trait, describing it as “[having] an outsider viewpoint or a quizzical viewpoint, or a curious viewpoint [...] that useful detachment strikes me as a very autistic characteristic”. Several participants felt that this made them better at “seeing the system” (i.e., recognising society’s perpetuation and capitalisation of the appearance ideal), thus have greater resiliency to societal pressures. Lucy said:

I can see why they value it [appearance ideals] and I can see why they go after it, and I can see why institutions promote it and why people follow it, and I can see how seductive it is [...] but it doesn’t hit my ears with the same kind of allure.

3.6. Taking care of the body

Most participants described how taking care of their body contributed to feeling positive toward their (internal and external) body. This largely involved engaging in positive body behaviours, such as avoiding alcohol consumption and smoking, and regularly participating in physical activities. For Ruth, this also involved eating a healthy balanced diet: “eating good food feels good to me [...] it’s not something that I do because I want to be virtuous particularly, it’s because I know that I feel better when I do that”. For some participants, caring for the body involved positive appearance investment, such as grooming and/or taking care of their skin. For example, Connor said, “so, one day a month, I’ll get a massage and then I’ll go get my hair cut and my beard done. It’s like two three hours of like pampering basically”. Aaron, however, emphasised that taking care of their *mind* is also important for respecting the body:

Self-care is trying to learn how to switch off and rest because my brain doesn’t like switching off [...] it’s working out how to maintain my

mental state and doing things which keep me in that routine.

When asked about their motivations for taking care of the body, most participants described it as means to protect the body; that is, preserving the longevity of its health and functionality. For example, Ruth described, “it’s about keeping in good working order, and enabling me to do those things that I enjoy doing”. However, other participants viewed caring for the body as merely a practicality. For example, when discussing self-care (e.g., bathing), Lewis said “I suppose rather than because I find it enjoyable, it’s just a task you’re supposed to do”. The way in which participants took care of the body was commonly presented in two ways.

3.6.1. Listening to the body

When asked what taking care of the body means to them, Kiri said it “involves actually listening to what your body wants [...] if I start to feel tired, that means I need to give it vitamins. If I start to feel just cranky and restless, that means take it for a walk”. Hence, for a few participants, caring for the body involved being attuned to their bodily needs. Some participants also understood and honoured the body’s limitations and boundaries, and not taking it for granted. This was frequently associated with managing certain aspects of their autism – as Amelia described, “it’s a lot more [of] that sensory input as well”. For example, Eleanor emphasised “having off time I think is a big self-care thing for me. The time and space, being in a safe space to sort of decompress, and take away maybe some of the like external stimulus stuff [...] I just want to lie on my back on the floor and do nothing for 20 min, and just like feel myself against the floor”.

3.6.2. The need for routine

Other participants, however, said that their ability to *listen* to the body was often unstable, resulting in inadvertent neglect of the body (e.g., forgetting to eat) – as Kieran said, “I’ll just absolutely forget, and suddenly five hours have gone by, and you haven’t fed yourself”. Having differences in body awareness (e.g., hyper- and hypo-sensitivities, interoceptive awareness) made taking care of their body more complicated for some participants. Eleanor said:

“I don’t really have like hunger thirst signals [...] It’s not until I’ve left it way too long and I’m really, really exhausted and like borderline fainty do I realise that I’ve neglected a care aspect”.

Furthermore, a few participants attributed difficulties with caring for the body to differences in executive functioning. For example, Amelia said that taking care of the body requires “planning the steps I might need to get out of the door. So, do I need to go to the toilet? Are you hydrated enough? Will you need to pee in about half an hour because you just drank some tea? [...] I’m already tired by the time we thought about standing up!”.

However, many participants demonstrated being attuned to their *unique* needs by having an understanding and/or awareness of them, and then adopting adaptive strategies accordingly. For example, some participants would wear the same or similar clothing and eat the same food and/or meals every day – which Lucy defined as “streak eating”. This was to ensure the body was adequately fuelled “without having to think too much”. Alternatively, participants ate the same food and wearing the same outfit was part of sensory management. Scarlett said:

I eat the same every day because it’s almost like a comfort thing [...] it’s just the fact that I already know the food. I know what the texture is like, I know how strong it is, and stuff like that.

Several participants would also refer to external sources (e.g., the time, to-do lists) as a reminder to care for the body. For instance, Kieran said: “I’ll set a timer on my phone every thirty minutes or every forty-five minutes [...] that will go off and tell me OK, get up, move and stretch, and hydrate yourself”. Eleanor felt that following a routine had “a double benefit because: a. I’ve addressed my needs, and b. I’ve got rid of the weird feeling [hunger]”. Importantly, this was emphasised to support them while also navigating everyday life, such as work and

university, which was perceived as uncertain and therefore potentially difficult. Hence, Aaron said its “controlling the controllable, and for me, that’s the main form of self-care”.

3.7. Body and appearance neutrality

Another striking internal perspective of participants’ positive body image pertains to their affective state. Many participants reported having difficulties with identifying and describing their feelings both generally and towards the body. As Rachel said, “what does make me feel positive about my body is a lot harder to put into words”. In contrast, some participants described their emotions as being intense, pendulum-like states. For example, Wayne said: “I think that’s happened with my body image a lot [...] I find it very hard to take a kind of middle ground approach”. Indeed, Aaron expressed that emotions for autistic people get “very intense very quick, and very overwhelming”. Whether it was negative or positive feelings towards ones’ appearance, being in a heightened emotional state was often an aversive experience. Given this, many participants expressed a desire for *neutrality* – as Amelia described, “it’s trying more to neutralise my emotional feelings I suppose”. While participants expressed this as neither a positive nor negative emotional state, it commonly represented an adaptive response that yields inner calmness, even comfort in the body. Lucy described it as:

A sense of sameness and stability and clarity and unity no matter what kind of day I’m experiencing [...] neutrality gives you that consistency, and through that consistency [comes] flexibility to be like I hate my shins today, but God will I love them in a week when I go on my next run.

Indeed, this promoted having flexibility and/or recognising the transience of negative bodily experiences (e.g., exposure to body image threats, uncomfortable bodily sensations) – as Scarlett said, “to ride the emotions out and feel what I feel”. This notion of neutrality also extended toward physical appearance among a few participants; however, it was commonly described as genuine disinterest. For example, when Kieran was asked about how he feels about his appearance, he said “most of the time, it’s kind of a non-issue. It just doesn’t enter my head at all”. Together, being in a state of neutrality encouraged participants to de-emphasise how the body is *seen*, but also how it is *felt*.

4. Discussion

This study aimed to develop a grounded theory of positive body image in autistic individuals. Based on interviews with 20 autistic adults from the United Kingdom, this study proposes a grounded theory that illustrates the ways in which positive body image manifests and is experienced by autistic individuals. Herein, positive body image in autistic individuals is theorised to encompass six main themes: body connection, body acceptance, appreciating body functionality and neurodivergent strengths, having a protective filter for the body, taking care of the body, and body and appearance neutrality. This grounded theory also explains intrapersonal and interpersonal aspects, which are described to mitigate or support autistic individuals’ positive body image. Below, noteworthy findings are highlighted.

To date, the term “body image” has largely been applied ambiguously to the autistic population – that is, referring to it as a global, rather than multifaceted, construct that is often stripped of nuance and meaning (e.g., Asada et al., 2018). Instead, autistic individuals in this study described a broad spectrum of experiences and evaluations regarding their body and appearance. Specifically, body image in autistic individuals is a construct that contains perceptual, attitudinal, behavioural, and affective dimensions, consistent with current conceptualisations of the construct in neurotypical populations (Cash, 2012; Tylka, 2019). Additionally, it is possible for autistic individuals to simultaneously experience states of negative and positive body image, as previously identified in other populations (Bailey et al., 2015, 2016;

Tiggemann & McCourt, 2013; Wood-Barcalow et al., 2010). One important – if broad – conclusion of the present study is that “body image” in autistic individuals is multidimensional and multifaceted, just as it is in neurotypical populations.

More specifically, we uncovered several characteristics of positive body image in our sample that were consistent with existing theory. For example, thematic findings around body connection and body acceptance resonate with qualitative findings with regards to positive body image and embodiment in neurotypical (Holmqvist Gattario & Frisén, 2019; Piran, 2016; Wood-Barcalow et al., 2010) and disabled populations (Bailey et al., 2015; Vinoski Thomas et al., 2019). Further, like the rest of the population, autistic individuals expressed gratitude for the functionality of their body (i.e., physical capacities, internal processes), care for their body (e.g., engage in adaptive appearance investment), and practiced adaptive body image-related behaviours (e.g., disengaging from harmful appearance-related information; Bailey et al., 2015; Wood-Barcalow et al., 2010; Tylka and Wood-Barcalow, 2015b). In broad outline, therefore, the present findings suggest that there may be some elements of positive body image that are common across diverse social identity groups (Tiggemann, 2015).

Additionally, our findings suggest that positive body image in autistic individuals – like that in other groups – developed in and is shaped by social environments, in that experiences are responsive to both immediate (e.g., family, peers) and broader socio-cultural environmental factors (e.g., Piran & Teall, 2012). Our findings do, however, highlight pertinent nuances: while autistic individuals were aware of “traditional” body image-related risk factors (e.g., ideal internalisation), they additionally emphasised social experiences (e.g., prejudice) associated with being part of a marginalised community. As such, it appears that experiences and manifestations of positive body image in autistic individuals may be shaped by (i) having physical safety, (ii) freedom from gender, appearance-related, and neuro-normative standards, (iii) equitable access to pleasurable (physical and intellectual) activities; and (iv) empowering and validating relationships. In this sense, we suggest that understanding bodily experiences in autistic individuals necessitates recognising epistemic authority (i.e., “the belief that the proposed account is the most accurate one”; Oikkonen, 2013, p. 284) – in other words, their body is perceived as being understood, acted upon, and experienced by others through an *oppressive*, in addition to an *objectifying*, lens (see Botha & Cage, 2022; O’Dell et al., 2016).

Indeed, our findings extend the literature on positive body image by articulating some experiences that were pertinent to autistic individuals. Namely, in addition to how the body *looks*, autistic individuals placed equal – if not greater – emphasis for how it *feels* (Nimbley et al., 2023). Indeed, this has been evidenced by wider research, particularly on positive embodiment (Piran, 2016) and functionality appreciation (Alleva & Tylka, 2021). More specifically, we support positive body image to comprise internal (i.e., sensory) and external (i.e., aesthetic) perspectives, akin to Vinoski Thomas et al.’s (2019) *functional-aesthetic body image*; however, the way in which this was expressed was unique in autistic individuals. In line with previous findings (Sibeoni et al., 2022), autistic individuals in this study discussed positive experiences of body awareness, such as feeling pleasure and joy toward the body through internal bodily experiences (e.g., stimming). Moreover, the extent to which autistic individuals positively and/or adaptively evaluated bodily signals and/or experiences and perceived the body (e.g., as a “safe” place) was relevant for having a positive body image. This is noteworthy, as this extends the association between body awareness (e.g., adaptive interoceptive appraisal) and facets of positive body image (e.g., Oswald et al., 2017; Todd et al., 2019) toward the autistic population. Existing literature (Brede et al., 2020; Healy et al., 2021; Sibeoni et al., 2022; Trevisan et al., 2021) has, however, found autistic individuals to present differing body awareness (i.e., altered interoception and exteroception). While we found these experiences to induce feelings of mind-body separation, autistic individuals in this study alternatively described body connection as having an accepting understanding of

these differences (e.g., awareness of absent hunger cues) and adopting agentic and adaptive strategies which are attuned to their own bodily needs (e.g., eating according to a routine).

Given this, our findings yield a critical theoretical development that challenges current conceptualisations of positive body image. Current theory (e.g., Cook-Cottone, 2015; Avalos & Tylka, 2005) is framed in a way which emphasises certain skills and/or processes (e.g., accurate internal processing) for experiencing important aspects of positive body image – namely, taking care of the body and/or *attuned self-care*. Yet, autistic individuals often associated these skills and/or processes with negative bodily experiences (e.g., feeling distress from hunger/satiety cues) or as being entirely inaccessible (for discussion, see Longhurst & Burnette, 2023). Therefore, emphasising these as only being *positive* experiences risks assuming (neuro)normativity, and thus may erase the lived experience of what it is to be embodied among autistic individuals (Rice et al., 2021; Vinoski Thomas et al., 2019).

Another unique theoretical contribution pertains to a recently popularised concept, *body neutrality*. While scholars have yet to fully develop a working definition, our findings fit with preliminary conceptualisations (Pellizzer & Wade, 2023; Smith et al., 2023; Swami, 2022) whereby prioritising the functionality of the body (i.e., what the body *can* do), rather than its appearance, and having a neutral self-image (i.e., allow the body to *just be*) were central components of body neutrality in autistic individuals. Scholars suggest body neutrality serves as a potential ‘stepping-stone’ toward having a positive body image (Swami, 2022). Relatedly, body neutrality shares many commonalities with body acceptance (e.g., having a neutral, middle-ground perspective of the body; Pellizzer & Wade, 2023). However, our findings suggest that body neutrality is an affective component of autistic individuals’ positive body image (e.g., dealing with difficult emotional states and/or experiences), whereas body acceptance was described as a cognitive component that is largely exclusive to the physical and/or physiological body (e.g., accepting changes in one’s appearance). Specifically, body neutrality in autistic individuals was expressed as a state of internal equilibrium (or ‘inner calmness’) and further involved the process of recognising, and willingly embracing, the transient nature of negative body experiences. While this resonates with the notion of body image flexibility (Sandoz et al., 2013), autistic individuals associated this with adverse internal experiences (e.g., over-stimulation, uncomfortable bodily sensations and/or affective states) in addition to, or instead of, ‘traditional’ body image threats (e.g., exposure to harmful messages). Yet, it is worth noting that alexithymia – an otherwise maladaptive body attentional style – may be mistaken for neutrality in some autistic individuals (e.g., difficulty describing positive and/or negative bodily states; see Trevisan, Mehling, et al., 2021). We therefore encourage scholars to further explore the conceptualisation of body neutrality, both in autistic individuals and the general population, to further development in theory and practice. We also prompt researchers to explore additional (i.e., sensory, affective) domains of positive body image in the autistic population.

4.1. Limitations and future directions

While this study presents novel findings, these should be interpreted with its limitations in mind. First, while our findings derive from a diverse sample in terms of age, gender, educational attainment, and body type, we did not focus on all relevant intersections of participants’ identities as part of their body image (e.g., gender identity), as this was deemed beyond the scope of this study. Nevertheless, the current sample was largely composed of white individuals. While this may be reflective of current disparities in autism diagnosis among racialised identities (Begeer et al., 2009; Roman-Urrestarazu et al., 2021), it would be valuable to examine positive body image in autistic individuals in a more racially diverse sample. Similarly, future research is encouraged to investigate other intersectional identities (e.g., sexual orientation, gender identities; Mallipeddi & VanDaalen, 2022), as well as those with

differing learning/communication abilities (e.g., non-verbal; Tager-Flusberg et al., 2016). It is estimated that 70% of autistic individuals have an intellectual disability, many of whom remain excluded from mainstream and disability-related research (Mefford et al., 2012; Russell et al., 2019). For ethical reasons, we elected to exclude those with a co-occurring intellectual disability, determined by whether they had received mainstream schooling and/or curriculum. However, this may have also inadvertently excluded autistic individuals who had received an individualised educational program. Efforts to improve the inclusion of the wider autistic population in future research should therefore carefully consider practice recommendations (see Nicolaidis et al., 2019), as doing so would help provide a more comprehensive understanding of body image in the wider autistic population.

Regarding additional demographic information, we did not ask participants to report any other cooccurring disabilities (e.g., mental health, physical, sensory). Furthermore, we did not screen for past and/or current eating disorder diagnoses when recruiting participants. It is therefore possible that participants in our sample may have a much more negative body image; it is unclear if their experiences were accounted for in our study/theory. We also acknowledge that capturing body size diversity using BMI can perpetuate weight stigma in research (for a discussion, see Calogero et al., 2016). We therefore encourage future studies to alternatively ask participants to self-identify their body size descriptively.

While participants were provided the option to conduct the interview in-person, the present study relied on web-based recruitment methods (e.g., online eligibility survey) and the use of videoconferencing. In turn, our sample may have favoured participants with internet access and, more broadly, those of higher socioeconomic status. We recommend future research among autistic individuals to conduct participatory-led research, which involves offering a broad range of recruitment and data collection methods to ensure accessibility and inclusivity, particularly for those who do not use verbal communication and/or have an intellectual disability (Fletcher-Watson et al., 2019; Rice et al., 2021; for practice recommendations, see Hobson et al., 2023; Nicolaidis et al., 2019). Relatedly, we recognise opting not to include participants’ images for photo-elicitation as a missed opportunity and therefore encourage scholars to utilise photo-elicitation technique as an innovative strategy for collecting data that expresses corporeality in a way that makes sense to the individual not only verbally, but visually.

Lastly, the research team of this current study discussed differing interpretations of the data and, as such, the data analysis was informed by their perceptions and experiences. For instance, we acknowledge consensus discussions are not free of bias and may have been influenced by potential power dynamics in the relationship between the coders. With this limitation in mind, our grounded theory requires further testing and refinement through future empirical research and research-informed practice. This may include using mixed-methods designs that utilises validated measures of positive body image (e.g., Body Appreciation Scale-2; Tylka & Wood-Barcalow, 2015a). Validation of such measures will be imperative for investigating the correlates, predictors, and outcomes of positive body image in this underrepresented population (for practice recommendations, see Swami & Barron, 2019; Swami et al., 2021; see also Nicolaidis et al., 2020).

4.2. Conclusion

Based on the accounts of 20 autistic individuals, we developed a grounded theory around the core category of positive body image, consisting of six main themes that reflect pertinent physical, mental, and social characteristics. Overall, our proposed grounded theory illustrates autistic individual’s experiences of positive body image relate to the *aesthetic* (i.e., how the body is seen) and *sensory* (i.e., how the body feels) body. Further, with autistic individuals being part of a marginalised population, positive body image is likely to present complex epistemological processes associated with their social location (e.g., prejudice).

Collectively, these findings highlight important areas for future research that may be able to inform body image-focused interventions. We recommend that researchers and practitioners (re)consider the relationship between intra-individual factors (i.e., physiological, mental) and macro-level social factors (e.g., see Field et al., 2023; see also Piran, 2015) among the autistic population. This includes – but is not exhaustive to – the availability of accepting and validating relationships (both personal and professional), wider social experiences (e.g., trauma), and (non)accessible (i.e., autism/sensory-suitable) resources. More broadly, our grounded theory supports predominant theories of body image, while also extending them to this underrepresented population. We hope this yields positive effects on autistic individuals' well-being by understanding how to better support them to have a healthier body image.

CRedit authorship contribution statement

Phaedra Longhurst: Conceptualisation, Methodology, Formal analysis, Project administration, Writing – original draft, Writing – review & editing. **Jane Aspell:** Methodology, Supervision, Writing – review & editing. **Jennifer Todd:** Supervision, Writing – review & editing. **Viren Swami:** Methodology, Formal analysis, Supervision, Writing – review & editing.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work presented in this paper.

Data availability

Data will be made available on request.

Appendix A. Interview schedule

1. Could you describe to me how you feel about your body and/or physical appearance in general? Probe: Did you feel this way about your body as a child/in your teens? Probe: How important is your physical appearance to who you are as a person?
2. What are your thoughts about current appearance ideals (e.g., on social media, TV)? Probe: Do current appearance ideals influence how you feel about yourself? Probe: Do you feel any pressure to conform to certain appearance ideals? Probe: Has your autism informed what you think the “ideal” body looks like?
3. Do you think your autism has influenced how you feel and think about your body? Probe: Are there any behaviours or experiences related to your autism that have affected how you feel about your body/appearance (e.g., stimming, masking)?
4. Could you tell me what you like most about your body? And what do you like most about your appearance? Probe: Do you feel/think respect and care for your body? Probe: Do you feel comfort in your body? Probe: Do you feel a connection with your body?
5. Are there any activities or things that you do to feel good about your body? Probe: How, if at all, do these activities help you feel good about your body? Probe: Do you engage in any self-care activities (e.g., eating well, stimming, follow a routine)?
6. Do you ever think about the functions that your body performs (e.g., your ability to move, internal sensations)? Probe: Is this something you think about much in your day-to-day life? Probe: How do these thoughts make you feel? Probe: Are there certain situations which makes you think about how your body functions?
7. Do you feel that people in your life (e.g., family, friends, partner) support you to feel positive about your body? Probe: what do you feel is helpful about these relationships? Probe: Have you learned anything about your body/appearance from these relationships?

8. What advice would you give to other autistic adults who want to feel positive about their bodies/appearance? Probe: what support would you want to receive to feel better about your body and appearance? Probe: How do you think people (e.g., health-care professionals) can support autistic people to feel positive about their bodies and appearance?
9. Is there anything you would like to add that you feel is important, and have not had the chance to share yet?

References

- Alleva, J. M., Diedrichs, P. C., Halliwell, E., Peters, M. L., Dures, E., Stuijzand, B. G., & Rumsey, N. (2018). More than my RA: A randomized trial investigating body image improvement among women with rheumatoid arthritis using a functionality-focused intervention program. *Journal of Consulting and Clinical Psychology*, 86(8), 666–676. <https://doi.org/10.1037/ccp0000317>
- Alleva, J. M., & Tylka, T. L. (2021). Body functionality: A review of the literature. *Body Image*, 36, 149–171. <https://doi.org/10.1016/j.bodyim.2020.11.006>
- Alleva, J. M., Tylka, T. L., Martijn, C., Waldén, M. I., Webb, J. B., & Piran, N. (2023). "I'll never sacrifice my well-being again": The journey from negative to positive body image among women who perceive their body to deviate from societal norms. *Body Image*, 45, 153–171. <https://doi.org/10.1016/j.bodyim.2023.03.001>
- American Psychiatric Association. (1994). *Diagnostic and Statistical Manual of Mental Disorders* (4th edn.). American Psychiatric Association.
- American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders* (5th edn.). American Psychiatric Association.
- Andersen, N., & Swami, V. (2021). Science mapping research on body image: A bibliometric review of publications in *Body Image*, 2004–2020. *Body Image*, 38, 106–119. <https://doi.org/10.1016/j.bodyim.2021.03.015>
- Asada, K., Tojo, Y., Hakarino, K., Saito, A., Hasegawa, T., & Kumagaya, S. (2018). Brief Report: Body Image in Autism: Evidence from Body Size Estimation. *Journal of Autism and Developmental Disorders*, 48(2), 611–618. <https://doi.org/10.1007/s10803-017-3323-x>
- Avalos, L., Tylka, T. L., & Wood-Barcalow, N. (2005). The Body Appreciation Scale: Development and psychometric evaluation. *Body Image*, 2(3), 285–297. <https://doi.org/10.1016/j.bodyim.2005.06.002>
- Babb, C., Brede, J., Jones, C. R. G., Serpell, L., Mandy, W., & Fox, J. (2022). A comparison of the eating disorder service experiences of autistic and non-autistic women in the UK. *European Eating Disorders Review*, 30(5), 616–627. <https://doi.org/10.1002/erv.2930>
- Bailey, K. A., Cline, L. E., & Gammage, K. L. (2016). Exploring the complexities of body image experience in middle age and older adult women within an exercise context: The simultaneous existence of negative and positive body images. *Body Image*, 17, 88–99. <https://doi.org/10.1016/j.bodyim.2016.02.007>
- Bailey, K. A., Gammage, K. L., van Ingen, C., & Ditor, D. S. (2015). It's all about acceptance": A qualitative study exploring a model of positive body image for people with spinal cord injury. *Body Image*, 15, 24–34. <https://doi.org/10.1016/j.bodyim.2015.04.010>
- Baron-Cohen, S., Wheelwright, S., Skinner, R., Martin, J., & Clubley, E. (2001). The Autism-Spectrum Quotient (AQ): Evidence from Asperger Syndrome/high-functioning autism, males and females, scientists and mathematicians. *Journal of Autism and Developmental Disorders*, 31, 5–17. <https://doi.org/10.1023/A:100563411471>
- Bates, E., McCann, J. J., Kaye, L. K., & Taylor, J. (2017). 'Beyond words': A researcher's guide to using photo elicitation in psychology. *Qualitative Research in Psychology*, 14(4), 459–481. <https://doi.org/10.1080/14780887.2017.1359352>
- Beeger, S., Bouk, S. E., Boussaid, W., Terwogt, M. M., & Koot, H. M. (2009). Underdiagnosis and referral bias of autism in ethnic minorities. *Journal of Autism and Developmental Disorders*, 39(1), 142–148. <https://doi.org/10.1007/s10803-008-0611-5>
- Bertilsson, I., Lundvik Gyllensten, A., Opheim, A., Gard, G., & Sjodahl Hammarlund, C. (2018). Understanding one's body and movements from the perspective of young adults with autism: A mixed-methods study. *Research in Developmental Disabilities*, 78, 44–54. <https://doi.org/10.1016/j.ridd.2018.05.002>
- Botha, M., & Cage, E. (2022). "Autism research is in crisis": A mixed method study of researcher's constructions of autistic people and autism research. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.1050897>
- Botha, M., Hanlon, J., & Williams, G. L. (2023). Does language matter? Identity-first versus person-first language use in autism research: A response to Vivanti. *Journal of Autism and Developmental Disorders*, 53, 870–878. <https://doi.org/10.1007/s10803-020-04858-w>
- Bottini, S. B., Morton, H. E., Buchanan, K. A., & Gould, K. (2023). Moving from Disorder to Difference: A systematic review of recent language use in autism research. *Autism in Adulthood, Ahead of Print*. <https://doi.org/10.1089/aut.2023.0030>
- Braun, V., & Clarke, V. (2013). *Successful Qualitative Research: A Guide for Beginners*. SAGE.
- Brede, J., Babb, C., Jones, C., Elliott, M., Zanker, C., Tchanturia, K., Serpell, L., Fox, J., & 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(12), 4280–4296. <https://doi.org/10.1007/s10803-020-04479-3>

- Brede, J., Cage, E., Trott, J., Palmer, L., Smith, A., Serpell, L., Mandy, W., & Ruasell, A. (2022). "We have to try to find a way, a clinical bridge" – autistic adults' experience of accessing and receiving support for mental health difficulties: A systematic review and thematic meta-synthesis. *Clinical Psychology Review*, 93. <https://doi.org/10.1016/j.cpr.2022.102131>
- Calogero, R.M., Tylka, T.L., Misinger, J.L., 2016. Scientific weightism: A view of mainstream weight stigma research through a feminist lens, in Roberts, T.A., Curtin, N., Duncan, L.E., Cortina, L.M. (Eds.), *Feminist perspectives on building a better psychological science of gender*. Springer International Publishing/Springer Nature, New York, pp. 9–28.
- Camm-Crosbie, L., Bradley, L., Shaw, R., Baron-Cohen, S., & Cassidy, S. (2019). "People like me don't get support": Autistic adults' experiences of support and treatment for mental health difficulties, self-injury, and suicidality. *Autism*, 23(6), 1431–1441. <https://doi.org/10.1177/1362361318816053>
- Cash, T. (Ed.). (2012). *Encyclopedia of Body Image and Human Appearance*. Elsevier.
- Charlton, J. I. (1998). *Nothing about Us Without Us: Disability Oppression and Empowerment*. University of California Press.
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. SAGE.
- Charmaz, K., & Thornberg, R. (2021). The pursuit of quality in grounded theory. *Qualitative Research in Psychology*, 18(3), 305–327. <https://doi.org/10.1080/14780887.2020.1780357>
- Cook-Cottone, C. P. (2015). Incorporating positive body image into the treatment of eating disorders: A model for attunement and mindful self-care. *Body Image*, 14, 158–167. <https://doi.org/10.1016/j.bodyim.2015.03.004>
- Corbin, J., & Strauss, A. (2008). *Basics of qualitative research* (3rd ed.). SAGE.
- Coussens, M., Destoop, B., De Baets, S., Desoete, A., Oostra, A., Vanderstraeten, G., & Van Waelvelde, H., & Van de Velde, D. (2020). A Qualitative Photo Elicitation Research Study to elicit the perception of young children with Developmental Disabilities such as ADHD and/or DCD and/or ASD in their participation. *PLoS One*, 15(3), Article e0229538. <https://doi.org/10.1371/journal.pone.0229538>
- Craig, A. D. (2002). How do you feel? Interoception: The sense of the physiological condition of the body. *Nature Reviews Neuroscience*, 3(8), 655–666. <https://doi.org/10.1038/Nrn894>
- Crane, L., Batty, R., Adeyinka, H., Goddard, L., Henry, L. A., & Hill, E. L. (2018). Autism diagnosis in the United Kingdom: Perspectives of autistic adults, parents, and professionals. *Journal of Autism & Developmental Disorders*, 48(11), 3761–3772. <https://doi.org/10.1007/s10803-018-3639-1>
- Body positive: Understanding and improving body image in science and practice. In Daniels, E. A., Gillen, M. M., & Markey, C. H. (Eds.), *Cambridge University Press*, (2018).
- Dassah, E., Aldersey, H. M., & Norman, K. E. (2017). Photovoice and persons with physical disabilities: A scoping review of the literature. *Qualitative Health Research*, 27(9), 1412–1422. <https://doi.org/10.1177/1049732316687731>
- Denzin, N.K., & Lincoln, Y.S. (2005). Introduction: The Discipline and Practice of Qualitative Research. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (pp. 1–32). Sage Publications Ltd.
- DuBois, D., Ameis, S. H., Lai, M.-C., Casanova, M. F., & Desarkar, P. (2016). Interoception in Autism Spectrum Disorder: A review. *International Journal of Developmental Neuroscience*, 52, 104–111. <https://doi.org/10.1016/j.ijdevneu.2016.05.001>
- Eigsti, I.-M. (2013). A review of embodiment in Autism Spectrum Disorders. *Frontiers in Psychology*, 4, 1. <https://doi.org/10.3389/fpsyg.2013.00224>
- Field, S. L., Fox, J. R. E., Jones, C. R. G., & Williams, M. O. (2023). "Work WITH us": A Delphi study about improving eating disorder treatment for autistic women with anorexia nervosa. *Journal of Eating Disorders*, 11(17). <https://doi.org/10.1186/s40337-023-00740-z>
- Fletcher-Watson, S., Adams, J., Brook, K., Charman, T., Crane, L., Cusack, J., ... Pellicano, E. (2019). Making the future together: Shaping autism research through meaningful participation. *Autism*, 23(4), 943–953. <https://doi.org/10.1177/1362361318786721>
- Frisén, A., & Holmqvist, K. (2010). What characterizes early adolescents with a positive body image? A qualitative investigation of Swedish girls and boys. *Body Image*, 7(3), 205–212. <https://doi.org/10.1016/j.bodyim.2010.04.001>
- Galvin, J., Evans, E. H., Talbot, C. V., Wilson, C., & Richards, G. (2022). The associations between autistic traits and disordered eating/drive for muscularity are independent of anxiety and depression in females but not males. *PLoS One*, 17(10), Article e0276249. <https://doi.org/10.1371/journal.pone.0276249>
- Glauser, B., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Weidenfeld & Nicolson.
- Haas, K., Costley, D., Falkmer, M., Richdale, A., Sofronoff, K., & Falkmer, T. (2016). Factors Influencing the Research Participation of Adults with Autism Spectrum Disorders. *Journal of Autism and Developmental Disorders*, 46(5), 1793–1805. <https://doi.org/10.1007/s10803-016-2708-6>
- Han, C. S., & Olliffe, J. L. (2016). Photovoice in mental illness research: A review and recommendations. *Health*, 20(2), 110–126. <https://doi.org/10.1177/1363459314567790>
- Harper, H. (1986). Meaning and work: A study in photo elicitation. *Current Sociology*, 34(3), 24–46. <https://doi.org/10.1177/001139286034003006>
- Hatfield, T. R., Brown, R. F., Giummarra, M. J., & Lenggenhager, B. (2019). Autism spectrum disorder and interoception: Abnormalities in global integration. *Autism*, 23(1), 212–222. <https://doi.org/10.1177/1362361317738392>
- Healy, S., Pacanowski, C., Kennedy, L., & Obrusnikova, I. (2021). "This cage that I'm stuck inside": Autistic adults' perceptions of weight management, body weight, and body image. *Autism*. <https://doi.org/10.1177/13623613211006989>
- Hennink, M. H., Kaiser, B. N., & Marconi, V. C. (2016). Code saturation versus meaning saturation: How many interviews are enough. *Qualitative Health Research*, 27(4). <https://doi.org/10.1177/1049732316665344>
- Herbert, B. M., & Pollatos, O. (2012). The body in the mind: On the relationship between interoception and embodiment. *Topics in Cognitive Science*, 4(4), 692–704. <https://doi.org/10.1111/j.1756-8765.2012.01189.x>
- Hobson, H., Linden, A., Crane, L., & Kalandadze, T. (2023). Towards reproducible and respectful autism research: Combining open and participatory autism research practices. *Research in Autism Spectrum Disorders*, 106. <https://doi.org/10.1016/j.rasd.2023.102196>
- Holmqvist Gattario, K., & Frisén, A. (2019). From negative to positive body image: Men's and women's journeys from early adolescence to emerging adulthood. *Body Image*, 28, 53–65. <https://doi.org/10.1016/j.bodyim.2018.12.002>
- 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>
- Jachyra, P., Anagnostou, E., Knibbe, T. J., Petta, C., Cosgrove, S., Chen, L., Capano, L., Moltisanti, L., & McPherson, A. C. (2019). "Girls don't have big tummies": The experiences of weight-related discussions for children with. *Autism Spectrum Disorders Autism*, 23(5), 1096–1105. <https://doi.org/10.1177/1362361318793020>
- Jones, R. P., Quigney, C., & Huws, J. C. (2009). First-hand accounts of sensory perceptual experiences in autism: A qualitative analysis. *Journal of Intellectual & Developmental Disability*, 28(2), 112–121. <https://doi.org/10.1080/1366825031000147058>
- Kinnaird, E., Norton, C., Pimblett, C., Stewart, C., & Tchanturia, K. (2019). Eating as an autistic adult: An exploratory qualitative study. *PLoS One*, 14(8), 1–17. <https://doi.org/10.1371/journal.pone.0221937>
- Koch, S. C., Gaida, J., Kortum, R., Bodingbauer, B., Manders, E., Thomas, E., Sieber, M., Von Arnim, A., Hirjak, D., & Fuchs, T. (2016). Body image in Autism: An exploratory study of the effects of dance movement therapy. *Autism Open Access*, 6(2), Article 100075. <https://doi.org/10.4172/2165-7890.1000175>
- Krumm, A., Ferraro, F. R., & Ingvalson, B. (2017). Exploring the relationship between autistic traits and body image, body satisfaction, and body competence. *The Journal of Psychology*, 151(6), 566–579. <https://doi.org/10.1080/00223980.2017.1372343>
- Lam, G. Y. H., Holden, E., Fitzpatrick, M., Raffaele Mendez, L., & Berkman, K. (2020). "Different but connected": Participatory action research using Photovoice to explore well-being in autistic young adults. *Autism*, 24(5), 1246–1259. <https://doi.org/10.1177/1362361319898961>
- Landor, A.M., Ramseyer Winter, V.L., Thurston, I.B., Chan, J., Craddock, N., Ladd, B., Tylka, T.L., Swami, V., Watson, L.B., & Choukas-Bradley, S. (2023). *The Sociocultural-Intersectional Body Image (SIBI) framework: Understanding the impact of white supremacy in body image research and practice*. Manuscript under review.
- Leedham, A., Thompson, A. R., Smith, R., & Freeth, M. (2019). "I was exhausted trying to figure it out": The experiences of females receiving an autism diagnosis in middle to late adulthood. *Autism*, 24(1), 135–146. <https://doi.org/10.1177/1362361319853442>
- Linardon, J., McClure, Z., Tylka, T. L., & Fuller-Tyskiewicz, M. (2022). Body appreciation and its psychological correlates: A systematic review and meta-analysis. *Body Image*, 42, 287–296. <https://doi.org/10.1016/j.bodyim.2022.07.003>
- Linardon, J., Messer, M., & Tylka, T. L. (2023). Functionality appreciation and its correlates: Systematic review and meta-analysis. *Body Image*, 45, 65–72. <https://doi.org/10.1016/j.bodyim.2023.02.002>
- Lincoln, Y. S., & Guba, E. G. (1986). But is it rigorous? Trustworthiness and authenticity in naturalistic evaluation. *New Directions for Program Evaluation*, 30, 73–84. <https://doi.org/10.1002/ev.1427>
- Longhurst, P. (2023). Body image and Autism: A scoping review. *Research in Autism Spectrum Disorder*, 105. <https://doi.org/10.1016/j.rasd.2023.102170>
- Longhurst, P., & Burnette, C. B. (2023). Challenges and Opportunities for Conceptualising Intuitive Eating in Autistic People. *International Journal of Eating Disorders Ahead of Print*. <https://doi.org/10.1002/eat.24057>
- Longhurst, P., & Swami, V. (2023). A feeling difficult to identify: Alexithymia is inversely associated with positive body image in adults from the United Kingdom. *Journal of Affective Disorders*, 334, 121–128. <https://doi.org/10.1016/j.jad.2023.04.142>
- Lupindo, B. M., Maw, A., & Shabalala, N. (2022). Late diagnosis of autism: Exploring experiences of males diagnosed with autism in adulthood. *Current Psychology Advance Online Publication*. <https://doi.org/10.1007/s12144-022-03514-z>
- Mallipeddi, N. V., & VanDaalen, R. A. (2022). Intersectionality within critical autism studies: A narrative review. *Autism Adulthood*, 4(4), 281–289. <https://doi.org/10.1089/aut.2021.0014>
- Mansour, S., Rozenblat, V., Fuller-Tyskiewicz, M., Paganini, C., Treasure, J., & Krug, I. (2016). Emotions mediate the relationship between autistic traits and disordered eating: A new autistic-emotional model for eating pathology. *Psychiatry Research*, 245, 119–126. <https://doi.org/10.1016/j.psychres.2016.08.021>
- Mason, D., McConachie, H., Garland, D., Petrou, A., Rodgers, A., & Parr, J. R. (2018). Predictors of quality of life for autistic adults. *Autism Research*, 11(8), 1138–1147. <https://doi.org/10.1002/aur.1965>
- Mefford, H. C., Batshaw, M. L., & Hoffman, E. P. (2012). Genomics, intellectual disability, and autism. *The New England Journal of Medicine*, 366(8), 733–743. <https://doi.org/10.1056/NEJMr1114194>
- Menzel, J.E. & Levine, M.P. (2011). Embodying experiences and the promotion of positive body image: The example of competitive athletics. In R.M. Calogero, S. Tantleff-Dunn, & J.K. Thompson. (Eds.), *Self-objectification in women: Causes, consequences, and counteractions* (pp. 163–186). *American Psychological Association*.
- Merleau-Ponty, M. (1962). *Phenomenology of Perception*. Routledge & Kegan Paul.

- Mul, C. L., Stagg, S. D., Herbelin, B., & Aspell, J. E. (2018). The feeling of me feeling for you: Interoception, alexithymia and empathy in autism. *Journal of Autism and Developmental Disorders*, 48, 2953–2967.
- National Institute for Health and Care Research [NIHR], 2023, July, Payment guidance for researchers and professionals. NIHR. (<https://www.nihr.ac.uk/documents/payment-guidance-for-researchers-and-professionals/27392>).
- Nicolaidis, C., Raymaker, D., Kapp, S. K., Baggs, A., Asgkenazy, E., McDonald, K., Weiner, M., Maslak, J., Hunter, M., & Joyce, A. (2019). The AASPIRE practice-based guidelines for the inclusion of autistic adults in research as co-researchers and study participants. *Autism*, 23(8), 2007–2019. <https://doi.org/10.1177/1362361319830523>
- Nicolaidis, C., Raymaker, D. M., McDonald, K. E., Lund, E. M., Leotti, S., Kapp, S. K., Katz, M., Beers, L. M., Kripke, C., Maslak, J., Hunter, M., & Zhen, K. Y. (2020). Creating Accessible Survey Instruments for Use with Autistic Adults and People with Intellectual Disability: Lessons Learned and Recommendations. *Autism in Adulthood*, 2(1), 61–76. <https://doi.org/10.1089/aut.2019.0074>
- Nimbley, E., Gillespie-Smith, K., Duffy, F., Maloney, E., Ballantyne, C., & Sharpe, H. (2023). “It’s not wanting to be thin or look small, it’s about the way it feels”: An IPA analysis of social and sensory differences in autistic and non-autistic individuals with anorexia and their parents. *Journal of Eating Disorders*, 11, 89. <https://doi.org/10.1186/s40337-023-00813-z>
- O’Dell, L., Bertilsdotter Rosqvist, H., Brownlow, C., Ortega, F., & Orsini, M. (2016). Critical autism studies: exploring epistemic dialogues and intersections, challenging dominant understandings of autism. *Disability & Society*, 31, 166–179.
- Oikonen, V. (2013). Competing Truths. *European Journal of English Studies*, 17(3), 283–294. <https://doi.org/10.1080/13825577.2013.867181>
- Oswald, A., Chapman, J., & Wilson, C. (2017). Do interoceptive awareness and interoceptive responsiveness mediate the relationship between body appreciation and intuitive eating in young women. *Appetite*, 109, 66–72. <https://doi.org/10.1016/j.appet.2016.11.019>
- Patton, M. Q. (2002). Two decades of developments in qualitative inquiry: A personal, experiential perspective. *Qualitative Social Work*, 1(3), 261–283. <https://doi.org/10.1177/1473325002001003636>
- Pellicano, E., Adams, D., Crane, L., Hollingue, C., Allen, C., Almendinger, K., Botha, M., Haar, T., Kapp, S. K., & Wheeley, E. (2023). Letter to the editor: A possible threat to data integrity for online qualitative autism research. *Autism Advance Online Publication*. <https://doi.org/10.1177/13623613231174543>
- Pellizzer, M. L., & Wade, T. D. (2023). Developing a definition of body neutrality and strategies for an intervention. *Body Image*, 46, 434–442. <https://doi.org/10.1016/j.bodyim.2023.07.006>
- Pickard, H., Pellicano, E., den Houting, J., & Crane, L. (2021). Participatory autism research: Early career and established researchers’ views and experiences. *Autism*, 26(1), 75–87. <https://doi.org/10.1177/13623613211019594>
- Piran, N. (2016). Embodied possibilities and disruptions: The emergence of the Experience of Embodiment construct from qualitative studies with girls and women. *Body Image*, 18, 43–60. <https://doi.org/10.1016/j.bodyim.2016.04.007>
- Piran, N. (2015). New possibilities in the prevention of eating disorders: The introduction of positive body image measures. *Body Image*, 14, 146–157. <https://doi.org/10.1016/j.bodyim.2015.03.008>
- Piran, N. (2019). The developmental theory of embodiment: Protective social factors that enhance positive embodiment. In T.L. Tylka & N. Piran (Eds.), *Handbook of positive body image and embodiment* (pp. 105–117). Oxford University Press.
- Piran, N., & Teall, T.L. (2012). The developmental theory of embodiment. In G. McVey, M.P. Levine, N. Piran, N. & H.B. Ferguson (Eds.), *Preventing eating-related and weight-related disorders: Collaborative research, advocacy and policy change* (pp. 171–199). Wilfred Laurier Press.
- Preece, D., Bercerra, R., Allan, A., Robinson, K., & Dandy, J. (2017). Establishing the theoretical components of alexithymia via factor analysis: Introduction and validation of the attention-appraisal model of alexithymia. *Personality and Individual Differences*, 119, 341–352. <https://doi.org/10.1016/j.paid.2017.08.003>
- Rice, C., Riley, S., LaMarre, A., & Bailey, K. A. (2021). What a body can do: Rethinking body functionality through a feminist materialist disability lens. *Body Image*, 38, 95–105. <https://doi.org/10.1016/j.bodyim.2021.03.014>
- Roman-Urrestarazu, A., van Kessel, R., Allison, C., Matthews, F. E., Brayne, C., & Baron-Cohen, S. (2021). Association of race/ethnicity and social disadvantage with autism prevalence in 7 million school children in England. *JAMA Pediatrics*, 175(6), Article e210054. <https://doi.org/10.1001/jamapediatrics.2021.0054>
- Russell, G., Mandy, W., Elliott, D., White, R., Pittwood, T., & Ford, T. (2019). Selection bias on intellectual ability in autism research: a cross-sectional review and meta-analysis. *Molecular Autism*, 10, 9. <https://doi.org/10.1186/s13229-019-0260-x>
- Sandoz, E. K., Wilson, K. G., Merwin, R. M., & Kellum, K. K. (2013). Assessment of body image flexibility: The Body Image-Acceptance and Action Questionnaire. *Journal of Contextual and Behavioral Science*, 2(1–2), 39–48. <https://doi.org/10.1016/j.jcbs.2013.03.002>
- Sibeoni, J., Massoutier, L., Valette, M., Manolios, E., Verneuil, L., Speranza, M., & Revah-Levy, A. (2022). The sensory experiences of autistic people: A metasynthesis. *Autism*, 26(5), 1032–1045. <https://doi.org/10.1177/13623613221081188>
- Sifneos, P. E. (1973). The prevalence of alexithymic characteristics in psychosomatic patients. *Psychotherapy and Psychosomatics*, 22(2–6), 255–262. <https://doi.org/10.1159/000286529>
- Smith, A. C., Ahuvia, I., Ito, S., & Schleider, J. L. (2023). Project Body Neutrality: Piloting a digital single-session intervention for adolescent body image and depression. *International Journal of Eating Disorders*. <https://doi.org/10.1002/eat.23976>
- Swami, V. (2022, October 6). *Body neutrality: what it is and how it can help lead to more positive body image*. The Conversation. (<https://theconversation.com/body-neutrality-what-it-is-and-how-it-can-help-lead-to-more-positive-body-image-191799#:~:text=Basically%2C%20the%20aim%20is%20to,body%20neutrality%20is%20about%20acceptance>).
- Swami, V. (2018). Considering positive body image through the lens of culture and minority social identities. In C. Markey, E. Daniels, & M. Gillen (Eds.), *The body positive: Understanding and improving body image in science and practice* (pp. 59–91). Cambridge: Cambridge University Press.
- Swami, V., & Barron, D. (2019). Translation and validation of body image instruments: Challenges, good practice guidelines, and reporting recommendations for test adaptation. *Body Image*, 31, 204–220. <https://doi.org/10.1016/j.bodyim.2018.08.014>
- Swami, V., Todd, J., & Barron, D. (2021). Translation and validation of body image instruments: An addendum to Swami and Barron (2019) in the form of frequently asked questions. *Body Image*, 37, 214–224. <https://doi.org/10.1016/j.bodyim.2021.03.002>. (<https://doi.org/10.1080/00224545.2017.1392278>)
- Tager-Flusberg, H., Skwerr, D. P., Joseph, R. M., Brukilacchio, B., Decker, J., Eggleston, B., Meyer, S., & Yoder, A. (2016). Conducting research with minimally verbal participants with autism spectrum disorder. *Autism*, 21(7), 852–861. <https://doi.org/10.1177/1362361316654605>
- Tiggemann, M. (2015). Considerations of positive body image across various social identities and special populations. *Body Image*, 14, 168–176. <https://doi.org/10.1016/j.bodyim.2015.03.002>
- Tiggemann, M., & McCourt, A. (2013). Body appreciation in adult women: Relationships with age and body satisfaction. *Body Image*, 10(4), 624–627. <https://doi.org/10.1016/j.bodyim.2013.07.003>
- Todd, J., Aspell, J. E., Barron, D., & Swami, V. (2019). Multiple dimensions of interoceptive awareness are associated with facets of body image in British adults. *Body Image*, 29, 6–16. <https://doi.org/10.1016/j.bodyim.2019.02.003>
- Trevisan, D. A., Mehling, W. E., & McPartland, J. C. (2021). Adaptive and maladaptive bodily awareness: Distinguishing interoceptive sensibility and interoceptive attention from anxiety-induced somatization in autism and alexithymia. *Autism Research*, 14(2), 240–247. <https://doi.org/10.1002/aur.2458>
- Trevisan, D. A., Parker, T., & McPartland, J. C. (2021). First-hand accounts of interoceptive difficulties in autistic adults. *Journal of Autism and Developmental Disorders*, 51(10), 3483–3491. <https://doi.org/10.1007/s10803-020-04811-x>
- Tylka, T.L. (2018). Overview of the field of positive body image. In E. A. Daniels, M. M. Gillen, & C. H. Markey (Eds.), *Body positive: Understanding and improving body image in science and practice* (pp. 6–33). Cambridge University Press.
- Tylka, T.L. (2019). Focusing on the positive: an introduction to the volume. In T. L. Tylka & N. Piran (Eds.), *Handbook of positive body image and embodiment: Constructs, protective factors, and interventions* (pp. 22–32). Oxford University Press.
- Tylka, T. L., & Wood-Barcalow, N. L. (2015a). The Body Appreciation Scale-2: Item refinement and psychometric evaluation. *Body Image*, 12, 53–67. <https://doi.org/10.1016/j.bodyim.2014.09.006>
- Tylka, T. L., & Wood-Barcalow, N. L. (2015b). What is and what is not positive body image? Conceptual foundations and construct definition. *Body Image*, 14, 118–129. <https://doi.org/10.1016/j.bodyim.2015.04.001>
- Vinoski Thomas, E., Warren-Findlow, J., Webb, J. B., Quinlan, M. M., Laditka, S. B., & Reeve, C. L. (2019). “It’s very valuable to me that I appear capable”: A qualitative study exploring relationships between body functionality and appearance among women with visible physical disabilities. *Body Image*, 30, 81–92. <https://doi.org/10.1016/j.bodyim.2019.05.007>
- Webb, J. B., Wood-Barcalow, N. L., & Tylka, T. L. (2015). Assessing positive body image: Contemporary approaches and future directions. *Body Image*, 14, 130–145. <https://doi.org/10.1016/j.bodyim.2015.03.010>
- Westwood, H., & Tchanturia, K. (2017). Autism spectrum disorder in anorexia nervosa: An updated literature review. *Current Psychiatry Reports*, 19, 41. <https://doi.org/10.1007/s11920-017-0791-9>
- Wood-Barcalow, N. L., Tylka, T. L., & Augustus-Horvath, C. L. (2010). “But I like my body”: Positive body image characteristics and a holistic model for young-adult women. *Body Image*, 7(2), 106–116. <https://doi.org/10.1016/j.bodyim.2010.01.00>