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Annual Review of Developmental Psychology

Aging Across the Autism Spectrum

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Keywords

autism, aging, midlife, older age

Abstract

Aging in autistic populations is a historically neglected but now rapidly advancing area of research. This narrative review provides a broad overview of the current state of the field of aging on the autism spectrum by synthesizing and critically appraising findings from across a range of research priorities identified by autistic people and other stakeholder groups. These include (a) the trajectory of core autistic features; (b) health profiles, biological aging, and mortality; (c) influential life experiences and life outcomes (including transition periods such as retirement and menopause and events such as trauma and periods of crisis); (d) cognitive function, aging, and dementia; and (e) quality of life and social support. Where possible, empirical research focusing on diagnosed autistic people is presented, but due to very high rates of underdiagnosis of autism in this demographic, trait-based research is also considered. Research specifically focusing on midlife (i.e., 40–64 years) and older age (i.e., 65 years and older) is presented where available, but due to a dearth of such research, lifespan studies (i.e., samples including middle-aged and older people, but not differentiating them) are also discussed. This review concludes by identifying future research priorities, as well as key conceptual issues that researchers interested in the intersection of aging and autism should consider for this emerging and rapidly advancing area of research.

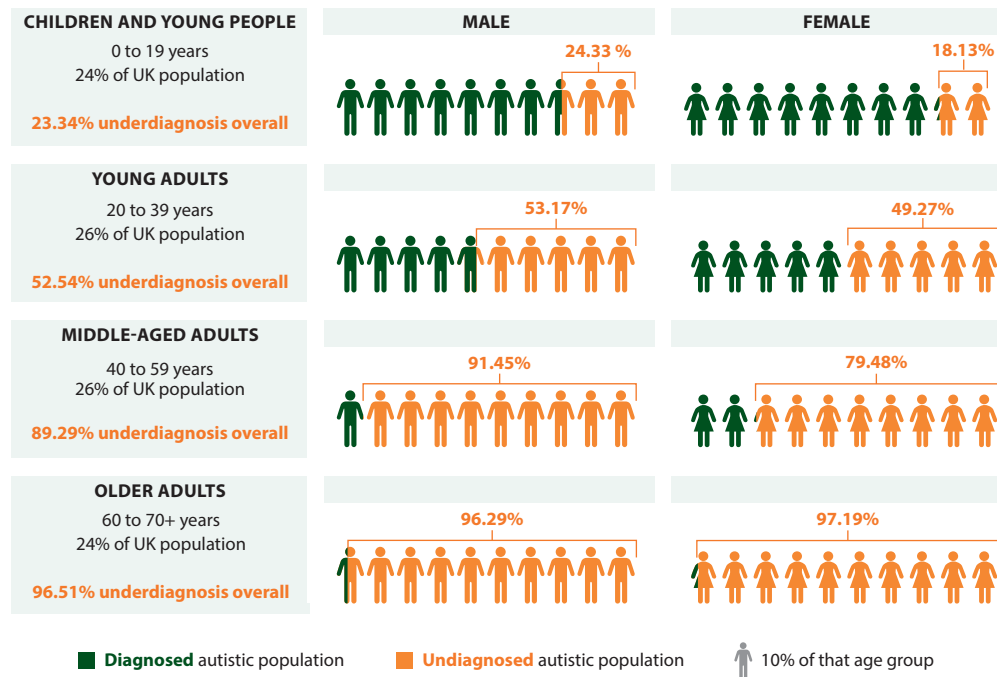
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BACKGROUND

Autism spectrum disorders (henceforth, simply “autism”) are a set of highly heritable neurodevelopmental conditions characterized by differences in sociocommunicative functioning and rigid and repetitive behaviors and interests (American Psychiatric Association 2022). While not an essential diagnostic feature, autistic people often have cognitive and functional differences (Velikonja et al. 2019) and higher rates of poor physical and mental health (Croen et al. 2015, O’Nions et al. 2024a), including periods of crisis and suicide (Hirvikoski et al. 2016, 2020; Cassidy et al. 2022), and they often report having a lower quality of life (van Heijst & Geurts 2015, Mason et al. 2018) and poorer normative life outcomes (Mason et al. 2021a) than the general population.

While autism is a lifelong condition, age disparities are evident in diagnostic rates. Approximately 1 in 100 (1%) people in the global population are autistic (Baxter et al. 2015, Brugha et al. 2016, Global Burden of Disease Study 2021 Autism Spectrum Collaborators 2025), but a recent analysis of UK health records identified that autism diagnosis rates in midlife and older age range from 1 in 550 (men aged 50–59) to <1 in 9,500 (women aged 70+)

**Figure 1**

Estimates of the percentage of diagnosed and undiagnosed autistic people in the United Kingdom, stratified into age groups (i.e., young people, young adults, adults in midlife, and adults in older age). These figures use summary data published by O’Nions et al. (2023), which we have reanalyzed for the purpose of this review article. We calculated a midpoint estimate (~2% autism prevalence, 3:1 male-to-female ratio) using O’Nions and colleagues’ lower-bound (~1% autism prevalence, 5:1 male-to-female ratio) and upper-bound (~3% autism prevalence, 3.25:1 male-to-female ratio) estimates. Recent global prevalence estimates of autism published by the Global Burden of Disease Study 2021 Autism Spectrum Collaborators (2025) suggest a global autism prevalence of 1% and a 2:1 male-to-female ratio; thus, our reanalysis of O’Nions et al. may underestimate the percentage of undiagnosed autistic women. We also present older age as people aged 60+, rather than aged 65+ as suggested in this review. This was due to the age stratification of O’Nions and colleagues’ summary data. See **Supplemental Table 1** for summary data.

(O’Nions et al. 2023). This suggests that 9 in 10 autistic people over age 50 may be undiagnosed or misdiagnosed with another condition (see **Figure 1**). This problem of historically poor identification and high rates of underdiagnosis in middle-aged and older populations is likely due to the various changes in the diagnostic criteria for autism over the past several decades (Happé & Charlton 2012, Rosen et al. 2021, Mason et al. 2022). Autism was first clinically described in the 1920s by Grunya Sukhareva and later named and clinically classified in the 1940s separately by Leo Kanner and Hans Asperger. However, it was not until the 1960s that autism was formally introduced into diagnostic manuals [e.g., the *International Classification of Diseases* (ICD) and *Diagnostic and Statistical Manual of Mental Disorders* (DSM)] as “infantile autism” under the umbrella of schizophrenia-related conditions. Infantile autism was viewed as a rare condition diagnosed mainly in young boys and often co-occurring with intellectual disability (ID) and language delay or difficulties. In the years since, the conceptualization and diagnostic criteria for autism have widened, reflected in the autism spectrum disorder diagnosis introduced in 2013. Today, autism is viewed as a spectrum (or constellation) of traits and characteristics that is associated with strengths and challenges in different areas, and the historical underrecognition of autistic women and girls is widely acknowledged. Furthermore, many people once overlooked

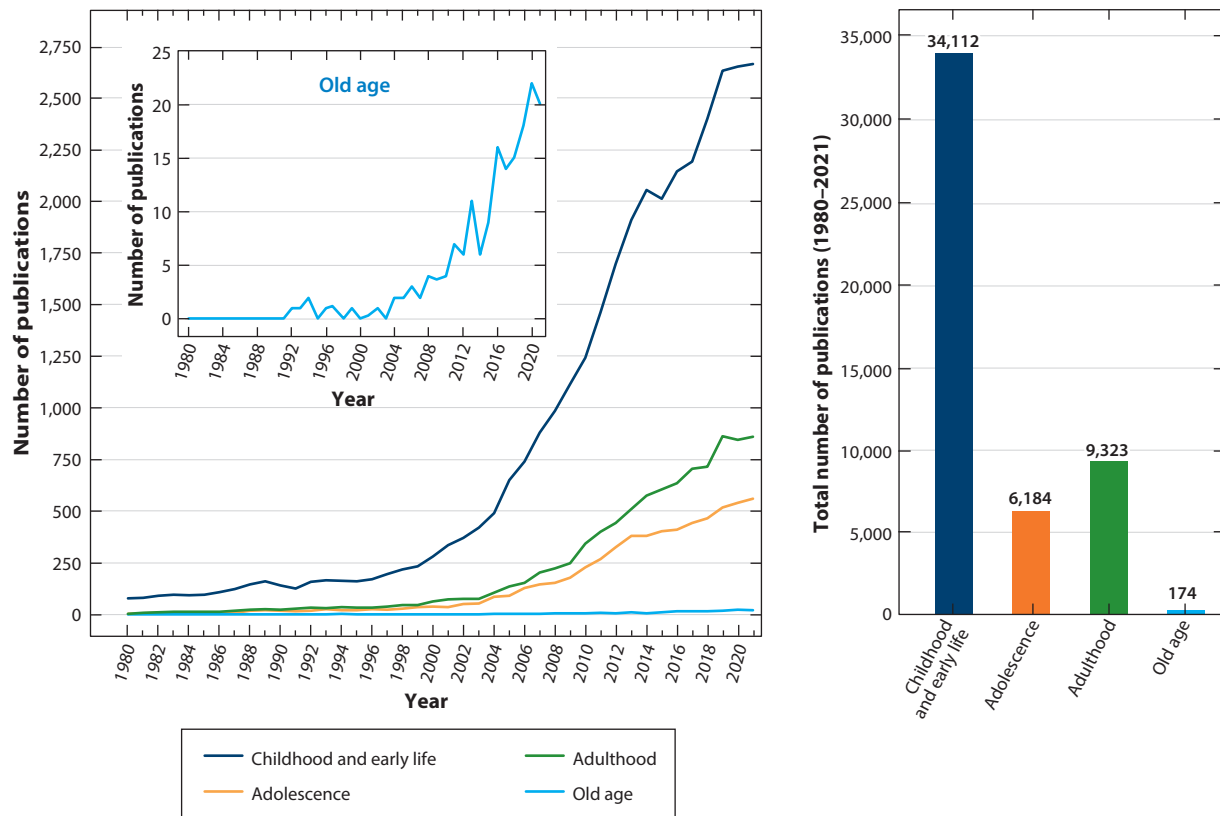


Figure 2

Indexed autism research articles published since 1980, stratified by age group studied. The bar graph illustrates the total numbers of articles and the line graph illustrates the number of articles published per year. The inset graph depicts the old-age research on a reduced scale. These figures use summary data published by Mason et al. (2022). Their search captured indexed articles published between 1980 and early 2021.

in childhood under previous, narrower diagnostic criteria now receive an autism diagnosis in adulthood and older age under the current, wider conceptualization (Happé & Frith 2020).

Despite the growing appreciation that autism is a lifelong condition and improving recognition of autism in middle-aged and older adults, we still know little about autism in midlife and older age and whether autistic people have different aging trajectories than the general population. While research on aging in autistic populations is increasing (marked by a staggering 392% increase in publications since 2012), only 0.4% of indexed research on autism since 1980 has focused on autistic people in midlife or older age (Mason et al. 2022) (see **Figure 2**). Given that most Western societies have aging populations due to increasing life expectancies, understanding the needs of autistic people as they age is a pressing global public health concern.

THE CURRENT REVIEW

This narrative review synthesizes and critically appraises findings from a range of studies related to research priorities identified by autistic people and other stakeholder groups (e.g., families and supporters, health-care professionals, and charity organizations; Roestorf et al. 2018, Roche et al. 2021). These include (a) the trajectory of core autistic features; (b) health profiles, biological aging,

and mortality; (c) influential life experiences and life outcomes; (d) cognitive function, aging, and dementia; and (e) quality of life and social support. Key published and forthcoming research is considered in relation to these five areas, focusing first on populations that are either diagnosed or self-identified as autistic (a categorical approach) and second on populations that have high versus low autistic traits (a dimensional approach). Additionally, where possible, research focusing specifically on autistic people in midlife (i.e., aged 40–64 years) and older age (i.e., aged 65 years and older) is considered, but in its absence, research utilizing lifespan approaches (i.e., samples including middle-aged and older people, but not differentiating them) are included. Key considerations for future research priorities are also made for this rapidly advancing, emerging area of research.

TRAJECTORY OF CORE AUTISTIC FEATURES

Longitudinal Trajectories in Autistic Populations

An area of clinical interest is whether core autistic features (i.e., sociocommunicative differences and rigid and repetitive behaviors and interests) change with age. Understanding whether the presentation of autism differs in middle-aged and older people compared with younger autistic people is of particular importance due to the high rates of underdiagnosis in people over 50 years old (O’Nions et al. 2023). However, to date, there have been very few studies that have examined the trajectory of core autistic features beyond midlife.

A recent review by Waizbard-Bartov & Miller (2023) examined longitudinal studies exploring how core autistic features in people with an autism diagnosis change across age. Of the 33 publications identified, only six included trajectories into adulthood, and all relied on caregiver- or parent-report. Among these, two followed their participants into their twenties (Piven et al. 1996, Simonoff et al. 2020), and the remaining four (which were part of a series of follow-up studies) followed their participants into their fifties (Seltzer et al. 2003, Shattuck et al. 2007, Taylor & Seltzer 2010, Woodman et al. 2015). Findings generally indicated that sociocommunicative differences tended to decrease with age, whereas rigid and repetitive behaviors and interests had greater developmental stability. These studies also suggest that demographic variables, such as female sex, higher childhood IQ, and parental education level, are associated with better outcomes and trajectories. When contextualizing these findings, it is important to consider that the autistic people in these studies were diagnosed before 2013 (i.e., under the DSM-IV-TR criteria). Those diagnosed under current diagnostic criteria (i.e., DSM-5 or ICD-11’s autism spectrum disorders) may have different clinical presentations and developmental trajectories.

However, different developmental patterns have also been found. In a recent publication that was not captured in the above review, Tomaszewski et al. (2025) examined trajectories of adaptive behaviors (i.e., daily living skills, communication, and socialization) in 266 people diagnosed with autism in childhood at a clinic in North Carolina, United States, between 1969 and 2000 (i.e., up to the release of the DSM-IV-TR criteria). At time of diagnosis, mean childhood IQ was 61.8 (standard deviation = 25.7, range = 39–138). Adaptive behaviors were measured via caregiver- or parent-report using versions of the Vineland scales. The modeling indicated that adaptive behaviors increased between early childhood and young adulthood (aged ~20 years) but then decreased from young adulthood to midlife (aged 55 years). Higher IQ and lower clinician-reported autistic trait scores were associated with better adaptive skill acquisition. However, there was huge heterogeneity in adulthood Vineland scores, and the authors’ modeling did not explore whether multiple trajectories might capture the data better than grouping all participants together into a single trajectory (e.g., whether a subgroup continues to gain adaptive skills while another subgroup plateaus or experiences a decrease).

Cross-Sectional Age Associations in Autistic Populations

Several cross-sectional studies have examined age-related patterns in autistic traits across adulthood. Lever & Geurts (2018) analyzed self-reported autistic traits using the Autism Spectrum Quotient 50-item (AQ-50) questionnaire (Dutch version) and Sensory Sensitivity Questionnaire (SSQ) in 237 autistic adults (aged 19–79 years) recruited through clinics compared with an age- and sex-matched nonautistic group ($n = 198$). In the autistic group, increasing age correlated with higher AQ and SSQ scores, with total AQ score (as well as AQ scores on attention to detail, attention switching, and social skills subscales) and total SSQ scores peaking in middle adulthood. However, AQ communication and imagination subscale scores showed no age-related trends. No age associations were found in the nonautistic group. Gender differences were also observed; autistic women reported higher total AQ scores (as well as higher AQ attention switching subscale scores) and SSQ scores than autistic men, while AQ social and communication subscale scores were similar. In contrast, nonautistic men had higher total and communication subscale AQ scores than nonautistic women. These findings suggest that autistic traits may lessen with age, which has clinical implications, as older autistic individuals undergoing assessment may present with more subtle characteristics compared with younger autistic individuals.

Research has also examined specific autistic traits, such as sensory reactivity. Chen et al. (2024) conducted a mixed-methods study analyzing self-reported sensory processing differences in autistic ($n = 265$, 52% women) and nonautistic ($n = 167$, 50% women) adults aged 40–93 years (mean = 60 years). Autistic participants reported significantly more frequent and intense sensory processing difficulties [measured via the sensory reactivity subscale of the Ritvo Autism Asperger Diagnostic Scale (RAADS) 14-item questionnaire along with bespoke questions], with large effect sizes. Additionally, 44% of autistic participants (versus 9.6% of nonautistic participants) reported a decline in their ability to cope with sensory experiences as they aged. Content analysis further supported this, with autistic participants noting increased sensitivity across all sensory domains, making management more challenging. While based on retrospective reflections, these findings suggest that sensory sensitivities may intensify with age in autistic individuals. Charlton et al. (2024), in a study of 210 autistic adults (aged 42–80, mean = 54 years), found that older age was associated with poorer self-rated sensory acuity (but not sensory sensitivity). However, poorer sensory acuity was associated with increased sensory sensitivity in this sample, which could be a plausible explanation for Chen and colleagues' finding of being less able to cope with sensory experiences in older age.

Cross-Sectional Age Associations in Trait-Based Populations

Other studies have examined age associations with autistic traits in the general population. Lodi-Smith et al. (2021b) examined cross-sectional associations between age and autistic traits (measured by the AQ-50) in a sample of 1,139 adults (aged 18–97, mean = 41 years, 22% aged over 65 years, 9% autistic). Results indicated no age associations with the AQ-50 subscale scores (i.e., social skills, routines, switching, attention, imagination), including in younger–midlife–older age group-stratified analyses.

However, some studies have identified age-related patterns in autistic traits. Chopik et al. (2021) examined cross-sectional age associations using the Broad Autism Phenotype Questionnaire (BAP-Q) in 2,966 adults (aged 19–86, mean = 36.5 years, 59% female, 1% autistic). Results showed that younger adults (aged 18–40) reported higher subscale scores in aloofness and pragmatic language difficulties compared with middle-aged and older adults (aged 40–86), while no age differences were found in the rigidity subscale score.

Differences between trait-based studies may stem from psychometric and conceptualization differences in measures. The AQ, designed to identify autism-related traits as potential diagnostic

indicators, uses a binary scoring system, while the BAP-Q measures subclinical autistic traits identified in nonautistic relatives and uses a severity scale. These differences may account for variations in findings across studies.

Across these studies, using both categorical and dimensional approaches, it is evident that findings vary greatly with no consistent pattern of results emerging. The studies also have key methodological limitations, particularly related to sampling; specifically, most longitudinal studies track participants only up to midlife, while most cross-sectional studies use lifespan approaches, resulting in limited sample sizes in midlife and older age groups. As such, further research that examines, both quantitatively and qualitatively, the clinical presentation of autistic traits in midlife and in older age and whether they change with age is required.

HEALTH PROFILES, FACTORS RELATED TO BIOLOGICAL AGING, AND MORTALITY

Health Profiles and Lifestyle Factors in Autistic Populations

Understanding the physical and mental health profiles of autistic people has also been raised as a key research priority (Roche et al. 2021), including in the context of aging (Happé & Charlton 2012, Wise 2020, Klein & Klinger 2024).

Research utilizing large-scale insurance and health record data from the United States (e.g., from Medicare, Medicaid) has indicated that autistic adults, including those in midlife and older age, have higher rates of almost all physical and mental health conditions. Croen et al. (2015), using a lifespan approach including middle-aged and older autistic adults, compared private insurance records of 1,507 autistic adults (aged 18–65+, $n = 312$, 21% over age 40 years) with a matched nonautistic comparison group ($n = 15,070$) in the United States. The autistic group again had higher rates of almost all physical health diagnoses than the comparison group, including immune diseases [odds ratio (OR) = 1.24], cardiovascular disease (OR = 2.54), metabolic disorders such as diabetes (OR = 2.18), endocrine disorders (ORs = 1.50–5.50), neurological disorders (OR = 2.21), and gastrointestinal disorders (OR = 1.35). Additionally, the autistic group were more likely to have “red flag” conditions, such as dyslipidemia (OR = 2.12) and hypertension (OR = 2.19), which are risk factors for cardiovascular disease. Furthermore, over half of the autistic group had at least one psychiatric diagnosis, with rates of anxiety (OR = 3.69) and depression (OR = 2.86) being notably higher than the comparison group. While Croen et al. do include people over 50 years old in their study, they did not specifically explore age-related differences in their sample.

However, some studies have specifically explored the health profiles of middle-aged and older autistic adults. Bishop-Fitzpatrick & Rubenstein (2019) examined the Wisconsin, United States, Medicaid insurance claims of 143 autistic adults (aged 40–88 years, mean = 52 years, 68% male), of which 64 had ID. Treatments for chronic health conditions [e.g., psychiatric disorders (72%), autoimmune conditions (70%), gastrointestinal disorders (50%), cardiovascular disease (49%)] were very common in this sample. However, no statistical differences were found between those with and without ID, although neurological disorders, gastrointestinal disorders, and psychiatric disorders were elevated in autistic people with versus without ID. Further studies have also focused specifically on those in older age (i.e., aged over 65 years). Hand et al. (2020) examined rates of physical and mental health diagnoses using United States-wide Medicare health records in a sample of autistic adults ($n = 4,650$) aged 65 years and older and a matched nonautistic comparison group ($n = 46,850$). The older adult autistic group in this study also had higher rates of nearly all mental and physical conditions compared with the matched nonautistic comparison group (e.g., mood disorders OR = 5.6, gastrointestinal disorders OR = 2.7). Additionally, the autistic group was more likely than the comparison group to have a diagnosis of conditions associated with

older age, including Parkinson's disease (OR = 6.1), cognitive disorders (OR = 8.4), osteoporosis (OR = 4.4), arthritis (OR = 1.6), and heart disease (OR = 2.1). Self-reported parkinsonism features have also been found to be commonly experienced in a sample of 505 autistic people in midlife and older age by Geurts et al. (2022), with up to 33% of their sample screening positive for possible or probable Parkinson's disease [a finding recently replicated by Wallace et al. (2025)].

Given the high rates of health conditions with modifiable risk factors (e.g., cardiovascular health) documented in these health records studies, some studies have examined health outcomes in relation to lifestyle factors. Weir et al. (2021), using a lifespan approach that included autistic people in midlife and older age, examined differences in health outcomes and lifestyle factors in a sample of 1,183 autistic adults (aged 16–90, mean 41 years, 12% aged over 60) with an age-matched nonautistic comparison group ($n = 1,203$). Autistic adults, when controlling for age and other demographic factors, had worse health outcomes and lifestyle factors than the comparison group. Poorer lifestyle factors (e.g., diet, exercise, being under- or overweight, and sleep) were predictors of higher risk of cardiovascular conditions, more so than family history. However, the study did not stratify by age or explore age associations. Despite this, the findings do provide valuable information about factors that could be modified to improve health outcomes in autistic populations.

Health Profiles and Lifestyle Factors in Trait-Based Populations

Health profiles and outcomes have also been examined in studies that use dimensional trait-based approaches. Stewart et al. (2021), using data from the PROTECT cohort (a general population study of healthy aging in >20,000 volunteers), examined rates of self-reported physical and mental health diagnoses and mental health symptoms in a sample of adults (aged 50–81, mean = 62 years, 67% female), ~1% of which endorsed high autistic traits ($n = 276$, measured using a short bespoke scale with good convergent validity with AQ/RAADS) compared with an age- and gender-matched low autistic trait group ($n = 10,495$). As found previously in samples that use categorical diagnosis-based approaches (e.g., Croen et al. 2015, Bishop-Fitzpatrick & Rubenstein 2019, Hand et al. 2020), middle-aged and older adults with high autistic traits had higher rates of common mental health diagnoses compared with adults with low autistic traits [e.g., depression (55% versus 23%), anxiety (31% versus 12%)]. Additionally, those with high autistic traits reported a higher total number of mental health condition diagnoses, with 67% having one or more diagnoses compared with 31% of the comparison group. This study also examined symptom-based scores for mental health problems, with the high autistic traits group reporting higher symptom scores and more above-cut-off scores for depression and anxiety than the low trait comparison group. However, unlike the health records studies with diagnosed autistic populations discussed above, this study did not find higher rates of physical health conditions; while the high autistic traits group reported higher rates of mild cognitive impairment (OR = 7.3) and arthritic conditions (OR = 2.14) than the comparison group, no other differences were found in other physical health diagnoses or the total number of physical health conditions.

Lifestyle factors have also been examined in relation to autistic traits, particularly the impact of sleep. Lodi-Smith et al. (2021a) examined the relationship between autistic traits (measured using the AQ-50) and self-reported general health and psychological well-being using the Patient-Reported Outcomes Measurement Information System (PROMIS) and the Behavioral Risk Factor Surveillance System in a sample of 294 adults (aged 53–96, mean = 70 years). This study found that autistic traits were associated with sleep disruption and fatigue, as well as poorer general health and symptoms of poor mental health.

In a more focused study examining sleep problems in the PROTECT dataset, Stewart et al. (2020a) examined a broad range of self-reported sleep experiences and dysfunction in a sample of middle-aged and older adults with high autistic traits ($n = 187$, aged 50–81, mean = 62 years)

compared with an age- and gender-matched low trait comparison group ($n = 6,740$). This study found that those with high autistic traits were more likely to self-report difficulties with various aspects of sleep (e.g., falling asleep, feeling refreshed when waking, overall sleep quality and satisfaction). This study also found that sleep problems were associated with symptoms of poor mental health, with this effect being stronger in the high autistic traits group. Similar findings emerged in a (yet to be published) study with diagnosed autistic adults aged 40–93 ($n = 265$, mean = 60 years) (A. Barbinta, A. Quinton, R.A. Charlton, F. Happé & G.R. Stewart, unpublished manuscript). While causality cannot be inferred from these cross-sectional studies, they highlight that sleep may be a modifiable factor that can be targeted for interventions to improve the health of aging people on the autism spectrum.

Health-Care Access in Autistic Populations

Given the high rates of health issues in autistic individuals, access to appropriate health care is essential. Mason et al. (2019a) conducted a systematic review of health-care barriers for autistic adults, identifying core autistic traits (e.g., communication differences, inflexibility, sensory sensitivities) as significant obstacles to receiving proper support. Concerns about clinician awareness of autism were also highlighted. While these barriers identified by Mason et al. are not age-specific, similar challenges have been reported in smaller-scale studies focusing on older age. Mansour et al. (2024) examined health-care support needs in older autistic adults ($n = 19$, aged 65–75, 47% male) in the United Kingdom using semistructured interviews. Participants expressed concerns about continuity of care, about the uncertainty of which services to access (e.g., mental health, older adult, or autism services), and about clinician understanding of autism in adulthood. Some also reported sensory barriers in medical settings. The study identified key areas for improvement, including comprehensive staff training, sensory-friendly environments, and proactive care policies to ensure consistency in health care. While based on a small sample, these findings provide valuable lived-experience insights into an often-overlooked issue in older autistic populations.

Biological Pace of Aging

Age-related changes to health are common and often become more evident in older age. However, examining the biological pace of aging is challenging due to the need for long-term monitoring of health and lifestyle factors that can influence the aging process. Despite this, one study to date has explored this using data from the Dunedin cohort (a population-representative birth cohort from New Zealand tracked from birth to age 45). Mason et al. (2021b) examined associations between autistic traits (measured using the AQ-10) and pace of aging, measured through a composite of 19 biomarkers across ages 26–45 in 915 members of the Dunedin birth cohort. Using 20 years of longitudinal data, analyses indicated that autistic traits (measured at age 45) were positively associated with a faster pace of aging composite score, older facial age, and worse self-, informant-, and interviewer-reported health. However, regression analyses indicated that higher childhood IQ and childhood socioeconomic status were both stronger predictors of pace of aging, highlighting the complexity of this relationship. While this study does provide insight into how autistic traits may influence aging, further exploration is required; in particular, the mediating role of associated factors, such as social isolation and poor mental health, needs to be examined to fully understand why and how autistic traits may be related to faster pace of aging.

Mortality and Life Expectancy

A landmark study by Hirvikoski et al. (2016) using Swedish Health Registry data examined all-cause and cause-specific mortality in autistic adults ($n = 27,111$, including 6,240 with ID),

compared with a large, matched control sample ($n = 2,672,185$). The study found that 2.6% of autistic individuals had died, compared with less than 1% of the control group, translating to 2.56 times greater odds of all-cause mortality for autistic individuals. Those with ID had an even higher risk (5.78 times greater odds). Common causes of death included circulatory system conditions (22% of deaths, $OR = 1.5$), cancers (12%, $OR = 1.8$), and suicide (12%, $OR = 7.5$). The median age of death was 58 years for autistic individuals without ID, 40 years for those with ID, and 80 years for the control group. However, it is important to contextualize these figures, as only 2.6% of the autistic sample had died at the time of the study.

Building on this, O’Nions et al. (2024b) analyzed UK health-care records from over 10 million people, comparing mortality rates of autistic individuals with ($n = 6,450$) and without ($n = 171,300$) ID to matched nonautistic samples. After adjusting for co-occurring conditions, findings showed that autistic women without ID had 1.78 times higher mortality than nonautistic women, while autistic men without ID had 1.34 times higher mortality than nonautistic men. Autistic women with ID had 3.65 times higher mortality than nonautistic women with ID, whereas autistic men with ID had 1.91 times higher mortality than nonautistic men with ID.

In terms of life expectancy, O’Nions et al. (2024b) estimated that autistic people without ID die approximately six years earlier than their nonautistic peers (75 versus 81 years). Autistic men with ID die about seven years earlier (71 versus 78 years), while autistic women with ID die ~15 years earlier (69 versus 84 years). However, these figures may be skewed due to high underdiagnosis rates in older adults, with estimates suggesting that up to 90% of autistic people over 50 remain undiagnosed. Older adults with an autism diagnosis may represent a subgroup with higher support needs and co-occurring conditions, such as epilepsy, that contribute to early mortality.

Finally, Hand et al. (2025) cautioned against misinterpretations of Hirvikoski and colleagues’ (2016) findings, particularly the misconception that autistic people have an average life expectancy of approximately 54 years. They emphasized that life expectancy can be accurately determined only once an entire cohort has died. While O’Nions and colleagues’ (2024b) study suggests that autistic individuals may have a shorter lifespan using predictive modeling of life expectancy and mortality rates, an accurate estimation of years lost remains highly uncertain due to underdiagnosis in older populations.

INFLUENTIAL LIFE EXPERIENCES AND LIFE OUTCOMES

Normative Life Outcomes in Autistic Populations

A key focus of much research is to improve the outcomes of autistic people. While outcomes can be conceptualized in different ways, normative outcomes (e.g., being in secure employment, living independently, being socially engaged) have been associated with quality of life in autistic populations (Bishop-Fitzpatrick et al. 2016). In a meta-analysis of 18 studies, which included 119 autistic people aged 18–61 years, Mason et al. (2021a) identified that approximately 20% of autistic people have a good normative outcome, while 26% have a fair outcome, and 50% have a poor outcome. While the sample demographics and variables reported varied between these studies, IQ was found to be a strong predictor of normative outcome grouping. While this specific systematic review does not focus on middle-aged and older autistic people, it does give an indication that many autistic adults approaching midlife and beyond may require additional support when making plans for older age.

Given the low rates of employment in autistic populations (Department for Work and Pensions 2024) and the association between poorer normative outcomes and quality of life, the process of retiring may differ greatly for autistic people versus their nonautistic peers. Only one qualitative study to date has examined retirement experiences of autistic people; Davies et al. (2024), using semistructured interviews, explored the experiences of planning for retirement with a sample of

autistic adults ($n = 12$, aged 56–70, mean = 63 years). Of the eight participants who had retired, seven had retired under the UK state pension age (mainly unplanned and in response to health issues). The thematic analyses suggested that retirement experiences were mixed; some participants experienced challenges with retirement and adjusting to retirement, while others found it a positive respite from work-related stresses. Most reported that they desired more tailored support for autistic people. However, as most participants retired early (and often unexpectedly), it is unclear whether these difficulties are associated with retirement per se or with unplanned early retirement several years below UK state retirement age. Further large-scale research is required.

Another area of concern in older age is housing security and whether the suitability of residential care differs for autistic versus nonautistic older people. Crompton et al. (2020) conducted a Delphi study (involving older autistic adults and their supporters, clinicians, and researchers) to explore the wants and needs of autistic people as they transition into and live in older adult residential care, with the aim of influencing practice and policy. Several themes were discussed, including ensuring that autistic people are supported as they plan for and transition into living in residential care, that care staff are autism-aware and respectful of autism-related differences, and that environments are sensory friendly. While this study does indicate that current residential care options may not be ideal for autistic people, further research is required to understand how adaptations can be appropriately integrated to ensure environments are appropriate for autistic people as they age.

Influential Life Experiences: Menopause

Menopause has recently emerged as a significant focus in autism research. Historically, autism was considered more common in people assigned male at birth, but growing recognition of autism in those assigned female at birth has led to revised estimates indicating a two-to-one male-to-female ratio (Global Burden of Disease Study 2021 Autism Spectrum Collaborators 2025). Menopause marks the end of the female reproductive cycle. It typically occurs in midlife and involves hormonal fluctuations that contribute to psychological (e.g., anxiety, low mood, fatigue, memory issues), somatic (e.g., muscle and joint pain, headaches, bodily changes), and vasomotor (e.g., hot flashes, night sweats) symptoms (Greendale et al. 2010).

The largest comparative study of menopause experiences in autism was recently conducted by Charlton et al. (2025). This study examined self-reported symptoms in 242 autistic women and people assigned female at birth (20% premenopausal, 30% menopausal, 50% postmenopausal) alongside an age-matched nonautistic group ($n = 100$). Autistic participants reported significantly higher rates of psychological and somatic symptoms than nonautistic individuals, though vasomotor symptoms were comparable. While both groups noted increased symptom severity during menopause, nonautistic participants perceived these changes as more negatively impactful. A possible explanation is that autistic individuals may experience pre-existing psychological and somatic challenges that intensify during menopause, whereas nonautistic individuals may see these symptoms as new and more disruptive. These cross-sectional findings highlight the need for further longitudinal research tracking autistic individuals before, during, and after menopause.

Qualitative studies have also explored menopause in autistic populations. Piper & Charlton (2025) used semistructured interviews with autistic ($n = 15$) and nonautistic ($n = 14$) women and people assigned female at birth to examine their experiences. Both groups reported a lack of menopause-related knowledge and negative psychological changes, but autistic participants faced additional barriers in accessing autism-aware medical support. Similarly, Brady et al. (2024) interviewed 24 autistic women and people assigned female at birth, finding consistent themes of limited information, inadequate autism-aware health care, and negative well-being impacts before, during, and after menopause.

Jenkins et al. (2024) further emphasized the lack of menopause-related information for autistic individuals, reporting that over 50% of their 508 survey respondents experienced unexpected symptoms, such as memory and concentration difficulties. Clinician awareness of menopause in autistic populations may also be limited; Benevides et al. (2024) analyzed the US Medicaid records of 26,904 autistic women and people assigned female at birth (aged 35–70 years) and found that only 4% had a recorded diagnosis of symptomatic menopause, compared with 8% in a matched general population sample. These findings underscore the need to improve awareness and knowledge of menopause among both autistic individuals and health-care professionals.

Influential Life Experiences: Adversity and Periods of Crisis

Adverse interpersonal life experiences, such as abuse and neglect, are common among autistic individuals across the lifespan. However, no published study has specifically examined these experiences in middle-aged and older autistic populations. One study, by Stewart et al. (2022), used a traits-based approach in the PROTECT cohort and investigated self-reported childhood and adulthood adversity and post-traumatic stress disorder (PTSD) symptoms in adults aged 50–81 years (mean = 62, 67% female). Participants with high autistic traits ($n = 251$) reported significantly higher rates of emotional and physical abuse, neglect, and sexual abuse compared with a low autistic traits group ($n = 9,179$). Severe trauma was reported by 30% of those with high autistic traits versus less than 8% of those in the low autistic traits group. PTSD symptoms were also significantly higher in the high autistic traits group, with trauma severity having a greater impact on PTSD symptoms in this group. A recent study (not yet published) conceptually replicated these findings in diagnosed autistic adults aged 40–90 years ($n = 446$, mean = 60 years) (E. McAdams, A. Quinton, R.A. Charlton, F. Happé & G.R. Stewart, unpublished manuscript).

Periods of crisis, specifically suicidality, are also a significant concern in autistic populations. A systematic review and meta-analysis by Newell et al. (2023) identified 36 studies ($n = 48,186$) and found a pooled prevalence estimate of 34% for suicidal ideation, 22% for suicide plans, and 24% for suicidal behaviors. While older age is a known risk factor for suicidality in the general population (Lutz et al. 2021), no study has specifically examined suicidality in autistic individuals in midlife and older age. However, one trait-based study by Stewart et al. (2023a) used the PROTECT cohort to explore self-reported suicidality in adults with high autistic traits ($n = 276$, aged 50–81, mean = 62 years, 67% female) compared with an age- and gender-matched low autistic traits group ($n = 10,495$). Those in the high autistic traits group were approximately six times more likely than those in the comparison group to experience suicidal ideation, thoughts of self-harm, nonsuicidal self-harm, and deliberate suicidal self-harm. These findings have been conceptually replicated in a sample of diagnosed autistic adults aged 40–93 years ($n = 265$, mean = 60 years) (Roper et al. 2025).

COGNITIVE FUNCTION, COGNITIVE AGING, AND DEMENTIA

Cognitive Functioning in Autistic Populations

Aging in the general population is associated with decline in some cognitive domains, including aspects of memory, executive function, and, debatably, theory of mind (i.e., the attribution of mental states). Younger people with autism have also been found to have somewhat reduced performance in some of these domains compared with neurotypical peers. Geurts and colleagues therefore suggested three possible trajectories for age-related cognitive changes in autism compared with typical development: parallel (i.e., age-related change at a similar rate and same

direction), safeguarding (i.e., autism may confer protection against some age-related change, resulting in slower aging), and double jeopardy (i.e., autism may show a steeper age-related change, resulting in faster aging). Geurts & Vissers (2012) tested these possibilities in a cross-sectional study with 23 autistic and 23 nonautistic older adults aged 51 to 83 years. In this small study they found evidence for a parallel decline in verbal memory, protection for verbal fluency, and double jeopardy in visual memory decline. In a much larger cross-sectional study, with 118 autistic adults aged 20–79 years (mean = 48 years) compared with an age- and gender- matched nonautistic comparison group ($n = 118$), Lever & Geurts (2016) examined performance across five cognitive domains: verbal memory, visual memory, working memory, theory of mind, and verbal fluency. Autistic participants had higher scores (i.e., better performance) in visual memory, lower scores (i.e., poorer performance) in verbal fluency and theory of mind, and similar performance in verbal memory compared with their nonautistic peers. There was no evidence in support of the double jeopardy hypothesis; the autistic group showed similar age-related decline in verbal memory, fluency, and theory of mind and reduced decline in visual memory. Notably, the autistic group aged 50 or older was not worse in theory of mind than the nonautistic group. Zivrali Yarar et al. (2020) also found that the usual disadvantage in theory of mind found in younger autistic groups did not generalize to older adults; younger (aged 19–48 years) but not older (50–71 years) autistic adults performed worse than nonautistic peers on theory of mind tasks, and only the nonautistic group showed a significant age effect, with older adults performing worse than younger adults.

Torenvliet et al. (2022) attempted to replicate the Lever & Geurts (2016) findings with a sample of 88 autistic adults aged 30–89 (mean = 55 years) and 106 age- and gender- matched nonautistic adults, measuring cognitive task performance in six domains (i.e., verbal memory, visual memory, working memory, theory of mind, verbal fluency, and processing speed). They found that the autistic group had lower performance scores in theory of mind, verbal fluency, and verbal memory than the nonautistic comparison group, but there were no significant age-by-group interactions, suggesting a parallel age-related effect on all cognitive domains. These findings suggest that cognitive differences persist into midlife and older age in autistic populations, particularly in theory of mind and verbal fluency. However, subgroup analyses in another large cross-sectional study suggest that these general profiles may not extend to all autistic adults in midlife and later (Torenvliet et al. 2023a); while 80% of the autistic participants ($n = 206$, aged 20–89) had a cognitive profile similar to the matched nonautistic comparison group, approximately 20% of the autistic group had a cognitive profile that statistically deviated compared with the nonautistic comparison group (10%). These results are consistent with previous cognitive studies suggesting that most autistic adults show fairly similar cognitive profiles to nonautistic adults yet highlighting the necessity for approaches reflecting the heterogeneity observed in autism.

In the largest longitudinal study of cognitive functions including middle-aged and older autistic adults to date, Torenvliet et al. (2023b) tracked 15 measures across two or three timepoints approximately three years apart in a group of 128 autistic and 112 nonautistic adults aged 24 to 85. They found parallel decline in the autistic and nonautistic adults, in line with the majority of the cross-sectional findings above. However, the authors note that their sample was largely diagnosed in adulthood and did not have ID; whether these findings generalize across the autism spectrum remains to be seen.

A recent systematic review and meta-analysis of cognitive and neuroimaging findings in autistic adults in midlife and older provides a very detailed examination of individual domains of memory, executive function, and attention, as well as general cognitive functioning (Wang et al. 2024); considerable heterogeneity is reported across studies, with specific task selection appearing to play a major role.

Cognitive Functioning in Trait-Based Populations

Cognitive changes in older age have also been examined in relation to autistic traits in general population samples. Stewart et al. (2018) examined cognitive task performance in a sample of 40 adults aged 60–91 years (mean = 73 years), with 20 meeting the cut-off for the BAP (i.e., high autistic traits) and 20 scoring below the cut-off on the BAP-Q measure. The BAP group had lower scores (i.e., poorer performance) in all cognitive measures (executive functions, verbal fluency, and working memory), even after accounting for symptoms of depression and anxiety.

Taking the same approach, and using the BAP-Q to split a sample of 96 adults aged 18–91 (younger = 49, aged 18–46; older = 47, aged 60–91) into high autism trait/BAP (18 younger, 21 older) and low autism trait (31 younger, 26 older) groups, Stewart et al. (2020b) found poorer theory of mind task performance in the high trait group. An interaction between BAP group and age group was found for some theory of mind measures, with older BAP participants having significantly poorer task performance than younger BAP participants. Similar findings have also recently been reported by Lo et al. (2025), with theory of mind (measured by two different computerized tasks) being associated with autistic traits in a sample of autistic and nonautistic adults aged 40–86 years old.

Working with the large online study of healthy aging described above, PROTECT, Stewart et al. (2023b) cross-sectionally compared the ~1% of the sample endorsing high autistic traits ($n = 325$, aged 50–80, mean = 61 years) with a large age-, gender-, and education-matched comparison group without autistic traits ($n = 11,744$) on online tests of memory, executive function, and information processing speed. The high trait group showed significantly lower performance on tests of memory, working memory, sustained attention, and information processing, but no difference from the comparison group in tests of simple attention or verbal reasoning. Results were largely unchanged when controlling for age and current depression and anxiety symptoms.

A recently published longitudinal study by Ghai et al. (2025) using PROTECT has extended Stewart and colleagues' cross-sectional findings by examining age-related change in spatial working memory over a 7-year period. Ghai and colleagues' growth mixture modeling indicated a single-class model best fit the data, suggesting that those with high autistic traits had similar memory changes to those with low autistic traits, supporting Geurts and colleagues' parallel aging hypothesis. Future longitudinal analyses of individual cognitive domains will be important to establish trajectories of cognitive aging and possible subgroups with respect to autistic traits.

Mismatch Between Cognitive Performance and Complaints

Several of the studies discussed above included self-report of cognitive problems alongside objective cognitive tests, typically using the Cognitive Failures Questionnaire. Autistic groups typically reported more cognitive failures, but this self-report was not related to task performance in either the autistic or comparison group.

Torenvliet et al. (2024) specifically explored the cross-sectional mismatch between cognitive task performance and self-reported cognitive failures in a sample of autistic adults ($n = 202$) and a matched group of nonautistic adults ($n = 247$) aged 20–85 (mean = 50 years). As before, self-report was not associated with task performance, with the exception of visual working memory performance, which was associated with reported cognitive failures in the autistic group. However, there was a strong association between depression and subjective cognitive failures. Regression analyses indicated that being autistic and having symptoms of depression were the strongest predictors of subjective cognitive failures. Age was not associated with or a predictor of cognitive failures. These findings indicate that self-reported cognitive functioning does not equal cognitive performance and should be interpreted with care, especially in individuals with symptoms of depression.

Self-Reported Cognitive Decline in Autistic and Trait-Based Populations

Klein et al. (2023) examined rates of self-reported red flags of cognitive decline and dementia [Aging and Dementia 8-item (AD-8) questionnaire] in a sample of 210 autistic adults aged 42–81 years (mean = 55 years). Upward of 30% of the sample met the cut-off criteria for cognitive decline, marked by declining interests in leisure activities, increases in everyday functional problems, and difficulties with thinking, memory, and judgment. Surprisingly, self-reported cognitive decline was not related to age or education level but was slightly elevated in women and those with self-rated higher autistic traits. However, the possible role of anxiety or depression—both elevated in autism—was not examined.

In relation to autistic traits in the general population, Stewart et al. (2023b), in their study of cognitive task performance in PROTECT, also found that the high autistic trait group self-reported more cognitive decline, although this no longer remained significant once current depression symptoms were controlled for.

Prevalence of Dementia in Autistic Populations

A number of retrospective cohort studies in the United States have used medical health insurance records to explore the rates of diagnosed dementia in autistic adults. Using data from Kaiser Permanente Northern California (a US insurance provider), Croen et al. (2015) found 2% of 1,507 autistic adults (aged 18–65+, $n = 312$, 21% over age 40 years) had a diagnosis of dementia, compared with 0.5% of a matched nonautistic comparison group ($n = 15,070$). Vivanti et al. (2021) examined rates of early-onset dementia (i.e., before the age of 65 years) using US Medicaid health records in a sample of 12,648 autistic adults without ID, 26,168 autistic adults with ID, 406,570 adults with ID, and 798,828 adults without ID (ages 30–54 years, ~20% 50–64 years old). The found that 4% of the autism group without ID and ~5% of the autism group with ID had early onset dementia, compared with 1% of those with neither autism nor ID and 7% of those with ID only. People in the 50–64 age group were more likely to have a diagnosis than those in the younger adult (30–49 years) group (i.e., 9% of autism-only group and 9.5% of autism-plus-ID group, compared with 2.6% of those with neither autism nor ID diagnoses and 12% of the ID-only group). Autistic people were four times as likely to have a diagnosis of early-onset dementia compared with the non-ID and nonautistic group.

In the most comprehensive study to date, Vivanti et al. (2025) looked at rates of dementia using data from 25 million Medicaid and 65 million Medicare health-care records, identifying 114,582 autistic individuals (67,705 autistic with ID, 46,877 autistic without ID, ~55% over age 40). Across all ages, 8.0% of the autistic participants without ID and 8.9% of the autistic participants with ID had a diagnosis of dementia. However, the odds of a dementia diagnosis greatly increased with age, with the prevalence of dementia increasing to 35% in the subgroup of autistic participants without ID over 65 years old and 31% in the subgroup of autistic participants with ID over 65 years old (compared with estimates of ~10% in the general population over 65). Given these high rates of dementia in autistic populations, there is a clear need for health policy related to supporting aging autistic people. Additionally, further research is required to understand the risk factors for dementia in autistic populations (e.g., modifiable factors, shared pathophysiology) and whether these differ from those for the general population.

QUALITY OF LIFE AND SOCIAL SUPPORT

Quality of Life in Autistic Populations

Enhancing autistic people's quality of life has been identified as a research priority (Klein & Klinger 2024). To date, there have been several studies examining quality of life in autistic

populations. In a systematic review by van Heijst & Geurts (2015), 14 publications that examine quality of life across the lifespan were identified (total autistic sample $n = 486$, comparison $n = 17,776$, samples aged from young to middle adulthood). These studies utilized a range of approaches, including self-report ($n = 8$), proxy-report ($n = 6$), and both. A consistent finding across these studies was that lower quality of life was self- and proxy-reported for autistic adults compared with nonautistic peers. However, van Heijst & Geurts noted that no study yet focused specifically on older adults, and no age effect was reported in the 11 studies reviewed. They conducted a small-scale study including middle-aged and older autistic adults ($n = 24$, aged 53–83, mean = 63 years) and a matched nonautistic comparison group and found lower quality of life in this sample of older autistic adults.

Further studies since the above review have focused on autistic people in midlife and older age. Mason et al. (2019b) examined quality of life in a sample of 69 autistic adults (male, $n = 48$, aged 55 and older, mean = 61 years), with their sample mostly receiving their autism diagnosis in adulthood. Consistent with the previous literature, physical, psychological, social, and environmental quality of life scores were found to be lower in their autistic sample compared with population normative scores.

However, some age-related differences have been found. Zıvrallı Yazar et al. (2022) examined age differences in quality of life in a sample of younger ($n = 38$, aged 19–48, mean = 31 years) and older ($n = 41$, aged 50–71, mean = 58 years) autistic adults compared with age-matched nonautistic adults (younger $n = 30$, older $n = 27$). The autistic groups reported lower quality of life than the comparison groups, with the same pattern being observed in both younger and older groups. When comparing older versus younger autistic groups, older autistic participants had significantly higher social quality of life scores than younger autistic participants; this was not found in the nonautistic comparison groups.

Factors That May Influence Quality of Life in Autistic Populations

Studies have also examined factors that may influence quality of life. For example, Mason et al. (2018) examined predictors of quality of life in a sample of 370 autistic adults (aged 17–90, mean = 41 years). Their study found that normative outcomes, such as being employed, being in a relationship, and availability of support, were positive predictors of quality of life. Additionally, their analyses indicated that being female, having mental health diagnoses, having high autistic traits, and older age were negative predictors of quality of life.

Building on these findings, Mason et al. (2019b), in their sample of middle-aged and older autistic adults described above, noted that depression and anxiety were associated with lower quality of life scores (also found by Zıvrallı Yazar et al. 2022). However, in Mason and colleagues' study, normative outcomes (e.g., being employed, having a social network, and living independently) were not a predictor of quality of life. Put together, these findings highlight the influence of mental health problems on quality of life and that normative outcomes may be less influential in autistic populations.

Qualitative studies have explored factors influencing quality of life in middle-aged and older autistic adults. Francis et al. (2025) examined quality of life in 15 autistic and 18 nonautistic adults (aged 50–89, mean = 61) through semistructured interviews. Both groups valued social support and experienced shrinking social networks, though nonautistic participants expressed dissatisfaction with the loss their networks. Health and sleep concerns were common, but autistic individuals frequently reported persistent mental health challenges, sensory sensitivities, and difficulties with change. Receiving an autism diagnosis was significant for autistic participants, aiding self-acceptance. While both groups accepted age-related changes, autistic individuals were

more open to seeking support, whereas nonautistic participants often viewed that as a loss of independence. Findings suggest shared quality-of-life influences across groups, as well as some autism-specific factors. Viner et al. (2024) further explored autism-specific quality-of-life factors in 16 autistic adults (aged 40–63, mean = 52) using semistructured interviews. Thematic analysis led to five key themes: the importance of receiving an autism diagnosis, managing social energy, maintaining autonomy, navigating the administrative burden of seeking support, and vulnerability as an older autistic person. The authors highlight how aging and autism intersect in shaping quality of life.

Social Connectedness and Support in Autistic Populations

Several studies mentioned above identified that social support is important to autistic people's quality of life. Charlton et al. (2023) explored this by examining associations between the availability of social support and quality of life in a sample of 388 autistic adults in midlife and older age (aged 40–83, mean = 52 years). Subjective social support was found to be a strong predictor of quality of life, with frequency of social interactions being a predictor for physical and psychological quality of life, while instrumental support was associated with social and environmental quality of life. These patterns remained when accounting for symptoms of depression. Additionally, age was not found to be a predictor of quality of life in this study. Studies have examined social connectedness and support in middle-aged and older autistic adults; Stewart et al. (2024) compared autistic ($n = 265$, 52% women) and nonautistic ($n = 167$, 50% women) adults aged 40–93 (mean = 60), most of whom were diagnosed in adulthood. The autistic group reported significantly fewer social connections and lower social support, with 20% being socially isolated (versus 4% in the nonautistic group). They also had higher loneliness scores. While social connectedness declined with age in both groups, loneliness increased with age only in the autistic group. Age-related social isolation and loneliness were more pronounced in men than women, suggesting autistic men may be particularly vulnerable. Building on these findings, a forthcoming follow-up study (H. Muse, E. Luedecke, R.A. Charlton, F. Happé & G.R. Stewart, unpublished manuscript) explored links between social connectedness and quality of life. While connectedness was associated with quality of life in both groups, the relationship was stronger in the autistic group, highlighting social connectedness as a potential factor in improving autistic adults' quality of life as they age.

PRIORITIES FOR FUTURE RESEARCH

As highlighted throughout this review (and illustrated in **Figure 3**), there is still a dearth of research focusing specifically on the experiences of and age-related change in autistic adults in midlife and older age. We recommend that future research on aging and autism should continue to adopt both dimensional (i.e., trait-based) and categorical (i.e., diagnostic groups) approaches, as these complementary methods can enhance our understanding of aging in populations on the autism spectrum while efforts continue to improve the identification and diagnosis of autistic individuals over 50.

To address the high rates of underdiagnosis of autism in middle-aged and older populations, there is a critical need for training and awareness initiatives to improve clinician understanding of autism in primary care and in general adult and older adult health services. By improving awareness, this may facilitate better identification of undiagnosed autistic individuals, particularly in older adulthood.

To address the lack of research examining age-related change, longitudinal research is essential to examine within-individual change over time. Furthermore, examining trajectories of how core autistic traits may change and interact with age has significant clinical implications,

		SAMPLING APPROACH		AGE SAMPLE			STUDY DESIGNS			
		Categorical (diagnosis) studies	Dimensional (trait) studies	Midlife and older age-specific studies	Mid/older age-stratified studies	Lifespan studies	Longitudinal studies	Qualitative studies	Population registry samples	Clinic samples
Trajectories of autistic traits	Core autistic traits	✓	✓	✓		✓	✓			✓
	Adaptive behaviors	✓		✓		✓	✓			✓
	Sensory processing	✓		✓				✓		
Health profiles, biological aging, and mortality	Health profiles	✓	✓	✓	Only old age	✓			✓	✓
	Health-care access	✓		✓	Only old age	✓		✓		
	Pace of aging		✓				✓		✓	
	Mortality	✓					✓		✓	
Influential life experiences and life outcomes	Normative outcomes	✓					✓			
	Retirement	✓		✓				✓		
	Menopause	✓		✓	✓			✓	✓	
	Adversity and trauma	✓	✓	✓	Forthcoming					
	Periods of crisis	✓	✓	✓	Forthcoming	✓			✓	
Cognitive function, aging, and dementia	Cognitive functioning	✓	✓	✓		✓	✓	✓		✓
	Complaints and decline	✓	✓	✓		✓		✓		✓
	Dementia	✓	✓	✓	✓	✓			✓	
Quality of life and social support	Quality of life	✓		✓	Forthcoming	✓		✓		✓
	Influences of quality of life	✓		✓		✓		✓		
	Social connectedness and support	✓	✓	✓	Forthcoming			✓		

Figure 3

Overview of topics included in this review, with methodological and sampling considerations. The cells that include a tick indicate that research on this topic has incorporated this methodology or sampling strategy, with blank cells indicating no research of this type to date.

especially for identifying undiagnosed autistic people. Additionally, further research is needed to explore the mechanisms underlying the challenges autistic people often face, to identify targets for intervention, and to mitigate poor outcomes in aging.

It is also important to consider the representativeness of the research discussed in this review. Much research focusing on older autistic adults focuses on those first diagnosed in adulthood and are likely impacted by survivor effects. As such, future research should also focus on autistic individuals with childhood diagnoses and those with co-occurring ID or higher support needs, as their trajectories of aging may differ from those of late-diagnosed autistic adults. Utilizing population-based cohorts could be important for representativeness.

Finally, a clearer conceptual framework for aging and autism research is necessary. Existing studies often examine experiences across the very wide age range represented by midlife and older age without clear differentiation between these life stages. We recommend that future research should consider stratifying these age groups (i.e., midlife spanning 40–64 years, older age spanning 65 years and older), which may improve our understanding of key developmental changes. In turn this could allow for improved access to tailored support for aging autistic people. Additionally, this stratified approach would facilitate the alignment of autism research with the age distinctions made in the broader field of aging research.

CONCLUSIONS

This narrative review highlights that autistic people in midlife and older age likely face poorer aging outcomes than their nonautistic peers. Despite gaps in the literature, current research (using categorical and dimensional approaches) suggests that middle-aged and older people on the autism spectrum are likely to experience higher rates of physical and mental health conditions, greater health-care barriers, increased early mortality, and more challenges with life transitions. They also experience more adverse life events, more cognitive difficulties, potential dementia risk, lower quality of life, greater social isolation, and lower social support. While cohort effects and high rates of underdiagnosis may influence these findings, it is evident that aging autistic people likely require tailored support to improve their outcomes. This review identifies key areas for future research, proposing an improved conceptual framework to better integrate autism into the field of aging research. It also underscores the importance of meaningful engagement with the autistic community and stakeholders to develop effective resources for this historically underserved population.

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LITERATURE CITED

- American Psychiatric Association. 2022. *Diagnostic and Statistical Manual of Mental Disorders*. American Psychiatric Association Publishing. 5th ed., text rev. <https://doi.org/10.1176/appi.books.9780890425787>
- Baxter AJ, Brugha TS, Erskine HE, Scheurer RW, Vos T, Scott JG. 2015. The epidemiology and global burden of autism spectrum disorders. *Psychol. Med.* 45(3):601–13. <https://doi.org/10.1017/S003329171400172X>
- Benevides TW, Cook B, Klinger LG, McLean KJ, Wallace GL, et al. 2024. Brief report: under-identification of symptomatic menopause in publicly-insured autistic people. *J. Autism Dev. Disord.* <https://doi.org/10.1007/s10803-024-06516-x>

- Bishop-Fitzpatrick L, Hong J, Smith LE, Makuch RA, Greenberg JS, Mailick MR. 2016. Characterizing objective quality of life and normative outcomes in adults with autism spectrum disorder: an exploratory latent class analysis. *J. Autism Dev. Disord.* 46(8):2707–19. <https://doi.org/10.1007/s10803-016-2816-3>
- Bishop-Fitzpatrick L, Rubenstein E. 2019. The physical and mental health of middle aged and older adults on the autism spectrum and the impact of intellectual disability. *Res. Autism Spectr. Disord.* 63:34–41. <https://doi.org/10.1016/j.rasd.2019.01.001>
- Brady MJ, Jenkins CA, Gamble-Turner JM, Moseley RL, van Rensburg MJ, Matthews RJ. 2024. “A perfect storm”: autistic experiences of menopause and midlife. *Autism* 28(6):1405–18. <https://doi.org/10.1177/13623613241244548>
- Brugha TSS, McManus S, Bankart J, Scott F, Purdon S, et al. 2016. Epidemiology of autism spectrum disorders in adults in the community in England. *Arch. Gen. Psychiatry* 68(5):459–65. <https://doi.org/10.1001/archgenpsychiatry.2011.38>
- Cassidy S, Au-Yeung S, Robertson A, Cogger-Ward H, Richards G, et al. 2022. Autism and autistic traits in those who died by suicide in England. *Br. J. Psychiatry* 221(5):683–91. <https://doi.org/10.1192/bjp.2022.21>
- Charlton RA, Happé FG, Shand AJ, Mandy W, Stewart GR. 2025. Self-reported psychological, somatic, and vasomotor symptoms at different stages of the menopause for autistic and non-autistic people. *J. Women's Health* 34(5):622–34. <https://doi.org/10.1089/jwh.2024.0784>
- Charlton RA, McQuaid GA, Wallace GL. 2023. Social support and links to quality of life among middle-aged and older autistic adults. *Autism* 27(1):92–104. <https://doi.org/10.1177/13623613221081917>
- Charlton RA, McQuaid GA, Wallace GL. 2024. Exploring the effects of age and sex on sensory sensitivities in middle and older aged autistic adults. *Res. Autism Spectr. Disord.* 117:102460. <https://doi.org/10.1016/j.rasd.2024.102460>
- Chen Y, Jenkins CA, Charlton RA, Happé F, Mandy W, Stewart G. 2024. “Utterly overwhelming”—a mixed-methods exploration of sensory processing differences and mental health experiences in middle-aged and older autistic adults. *Autism Adulthood*. In press. <https://doi.org/10.1089/aut.2024.0031>
- Chopik WJ, Oh J, Nuttall AK, Thakkar KN, Ingersoll B. 2021. Age differences in broader autism phenotype traits from young adulthood to older adulthood. *Autism Res.* 14(7):1459–71. <https://doi.org/10.1002/aur.2504>
- Croen LA, Zerbo O, Qian Y, Massolo ML, Rich S, et al. 2015. The health status of adults on the autism spectrum. *Autism* 19(7):814–23. <https://doi.org/10.1177/1362361315577517>
- Crompton CJ, Michael C, Dawson M, Fletcher-Watson S. 2020. Residential care for older autistic adults: insights from three multiexpert summits. *Autism Adulthood* 2(2):121–27. <https://doi.org/10.1089/aut.2019.0080>
- Davies J, Matthews R, Romualdez AM, Pellicano E, Remington A. 2024. “Retirement is one hell of a change”: autistic people’s experiences of retiring. *Autism Adulthood*. In press. <https://doi.org/10.1089/aut.2023.0155>
- Department for Work and Pensions. 2024. *The Buckland review of autism employment: report and recommendations*. Rep., Department for Work and Pensions. <https://www.gov.uk/government/publications/the-buckland-review-of-autism-employment-report-and-recommendations/the-buckland-review-of-autism-employment-report-and-recommendations>
- Francis D, Hershman D, Charlton RA, Happé F, Stewart GR. 2025. “Bigger lows, but higher highs”: a qualitative exploration of the similarities and differences in quality of life of middle-aged and older autistic and non-autistic adults. *Res. Autism* 123:202533. <https://doi.org/10.1016/j.reia.2025.202533>
- Geurts HM, McQuaid GA, Begeer S, Wallace GL. 2022. Self-reported parkinsonism features in older autistic adults: a descriptive study. *Autism* 26(1):217–29. <https://doi.org/10.1177/13623613211020183>
- Geurts HM, Vissers ME. 2012. Elderly with autism: executive functions and memory. *J. Autism Dev. Disord.* 42(5):665–75. <https://doi.org/10.1007/s10803-011-1291-0>
- Ghai S, Eshetu A, Corbett A, Ballard C, Aarsland D, et al. 2025. The association between autism spectrum traits and age-related spatial working memory decline: a large-scale longitudinal study. *Gerontologist* 65(5):gnaf096. <https://doi.org/10.1093/geront/gnaf096>

- Global Burden of Disease Study 2021 Autism Spectrum Collaborators. 2025. The global epidemiology and health burden of the autism spectrum: findings from the Global Burden of Disease Study 2021. *Lancet Psychiatry* 12(2):111–21. [https://doi.org/10.1016/S2215-0366\(24\)00363-8](https://doi.org/10.1016/S2215-0366(24)00363-8)
- Greendale GA, Wight RG, Huang M-H, Avis N, Gold EB, et al. 2010. Menopause-associated symptoms and cognitive performance: results from the study of women's health across the nation. *Am. J. Epidemiol.* 171(11):1214–24. <https://doi.org/10.1093/aje/kwq067>
- Hand BN, Angell AM, Harris L, Carpenter LA. 2020. Prevalence of physical and mental health conditions in Medicare-enrolled, autistic older adults. *Autism* 24(3):755–64. <https://doi.org/10.1177/1362361319890793>
- Hand BN, Nikahd M, Wolf BJ, Madison Hyer J, Longo A, et al. 2025. Citation context analysis of autism mortality and suicide findings from Hirvikoski's landmark study. *JAMA Netw. Open* 8(2):e2461953. <https://doi.org/10.1001/jamanetworkopen.2024.61953>
- Happé F, Charlton RA. 2012. Aging in autism spectrum disorders: a mini-review. *Gerontology* 58(1):70–78. <https://doi.org/10.1159/000329720>
- Happé F, Frith U. 2020. Annual research review: looking back to look forward – changes in the concept of autism and implications for future research. *J. Child Psychol. Psychiatry* 61(3):218–32. <https://doi.org/10.1111/jcpp.13176>
- Hirvikoski T, Boman M, Chen Q, D'Onofrio BM, Mittendorfer-Rutz E, et al. 2020. Individual risk and familial liability for suicide attempt and suicide in autism: a population-based study. *Psychol. Med.* 50(9):1463–74. <https://doi.org/10.1017/S0033291719001405>
- Hirvikoski T, Mittendorfer-Rutz E, Boman M, Larsson H, Lichtenstein P, Bölte S. 2016. Premature mortality in autism spectrum disorder. *Br. J. Psychiatry* 208(3):232–38. <https://doi.org/10.1192/bjp.bp.114.160192>
- Jenkins CA, Moseley RL, Matthews RJ, van Rensburg MJ, Gamble-Turner JM, Brady MJ. 2024. “Struggling for years”: an international survey on Autistic experiences of menopause. *Neurodiversity* 2. <https://doi.org/10.1177/27546330241299366>
- Klein CB, Klinger LG. 2024. Aging well and autism: a narrative review and recommendations for future research. *Healthcare* 12(12):1207. <https://doi.org/10.3390/healthcare12121207>
- Klein CB, McQuaid GA, Charlton RA, Klinger LG, Wallace GL. 2023. Self-reported cognitive decline among middle and older age autistic adults. *Autism Res.* 16(3):605–16. <https://doi.org/10.1002/aur.2877>
- Lever AG, Geurts HM. 2016. Age-related differences in cognition across the adult lifespan in autism spectrum disorder. *Autism Res.* 9(6):666–76. <https://doi.org/10.1002/aur.1545>
- Lever AG, Geurts HM. 2018. Is older age associated with higher self- and other-rated ASD characteristics? *J. Autism Dev. Disord.* 48(6):2038–51. <https://doi.org/10.1007/s10803-017-3444-2>
- Lo GHM, Dale C, Happé F, Stewart GR. 2025. Theory of mind mediates the association between autistic traits and social isolation in middle-aged and older adults. *Autism Res.* <https://doi.org/10.1002/aur.70036>
- Lodi-Smith J, Rodgers JD, Kozłowski K, Khan S, Marquez Luna V, et al. 2021a. Autism characteristics and self-reported health in older adulthood. *J. Gerontol. B* 76(9):1738–44. <https://doi.org/10.1093/geronb/gbab136>
- Lodi-Smith J, Rodgers JD, Marquez Luna V, Khan S, Long CJ. 2021b. The relationship of age with the Autism-Spectrum Quotient Scale in a large sample of adults. *Autism Adulthood* 3(2):147–56. <https://doi.org/10.1089/aut.2020.0010>
- Lutz J, Van Orden KA, Bruce ML, Conwell Y, Members of the NIMH Workshop on Social Disconnection in Late Life Suicide. 2021. Social disconnection in late life suicide: an NIMH workshop on state of the research in identifying mechanisms, treatment targets, and interventions. *Am. J. Geriatr. Psychiatry* 29(8):731–44. <https://doi.org/10.1016/j.jagp.2021.01.137>
- Mansour H, Gillions A, Brown J, Pattenden A, Hartley S. 2024. “It's designed for someone who is not me”: a reflexive thematic analysis of the unmet healthcare support needs in UK autistic adults aged 65 years and over. *Autism* 29(3):754–65. <https://doi.org/10.1177/13623613241291081>
- Mason D, Capp SJ, Stewart GR, Kempton MJ, Glaser K, et al. 2021a. A meta-analysis of outcome studies of autistic adults: quantifying effect size, quality, and meta-regression. *J. Autism Dev. Disord.* 51(9):3165–79. <https://doi.org/10.1007/s10803-020-04763-2>

- Mason D, Ingham B, Urbanowicz A, Michael C, Birtles H, et al. 2019a. A systematic review of what barriers and facilitators prevent and enable physical healthcare services access for autistic adults. *J. Autism Dev. Disord.* 49(8):3387–400. <https://doi.org/10.1007/s10803-019-04049-2>
- Mason D, Mackintosh J, McConachie H, Rodgers J, Finch T, Parr JR. 2019b. Quality of life for older autistic people: the impact of mental health difficulties. *Res. Autism Spectr. Disord.* 63:13–22. <https://doi.org/10.1016/j.rasd.2019.02.007>
- Mason D, McConachie H, Garland D, Petrou A, Rodgers J, Parr JR. 2018. Predictors of quality of life for autistic adults. *Autism Res.* 119(8):1138–47. <https://doi.org/10.1002/aur.1965>
- Mason D, Ronald A, Ambler A, Caspi A, Houts R, et al. 2021b. Autistic traits are associated with faster pace of aging: evidence from the Dunedin study at age 45. *Autism Res.* 14(8):1684–94. <https://doi.org/10.1002/aur.2534>
- Mason D, Stewart GR, Capp SJ, Happé F. 2022. Older age autism research: a rapidly growing field, but still a long way to go. *Autism Adulthood* 4(2):164–72. <https://doi.org/10.1089/aut.2021.0041>
- Newell V, Phillips L, Jones C, Townsend E, Richards C, Cassidy S. 2023. A systematic review and meta-analysis of suicidality in autistic and possibly autistic people without co-occurring intellectual disability. *Mol. Autism* 14:12. <https://doi.org/10.1186/s13229-023-00544-7>
- O’Nions E, Brown J, Buckman JEJ, Charlton R, Cooper C, et al. 2024a. Diagnosis of common health conditions among autistic adults in the UK: evidence from a matched cohort study. *Lancet Reg. Health Eur.* 41:100907. <https://doi.org/10.1016/j.lanepe.2024.100907>
- O’Nions E, Lewer D, Petersen I, Brown J, Buckman JEJ, et al. 2024b. Estimating life expectancy and years of life lost for autistic people in the UK: a matched cohort study. *Lancet Reg. Health Eur.* 36:100776. <https://doi.org/10.1016/j.lanepe.2023.100776>
- O’Nions E, Petersen I, Buckman JEJ, Charlton R, Cooper C, et al. 2023. Autism in England: assessing underdiagnosis in a population-based cohort study of prospectively collected primary care data. *Lancet Reg. Health Eur.* 29:100626. <https://doi.org/10.1016/j.lanepe.2023.100626>
- Piper MA, Charlton RA. 2025. Common and unique menopause experiences among autistic and non-autistic people: a qualitative study. *J. Health Psychol.* <https://doi.org/10.1177/13591053251316500>
- Piven J, Harper J, Palmer P, Arndt S. 1996. Course of behavioral change in autism: a retrospective study of high-IQ adolescents and adults. *J. Am. Acad. Child Adolesc. Psychiatry* 35(4):523–29. <https://doi.org/10.1097/00004583-199604000-00019>
- Roche L, Adams D, Clark M. 2021. Research priorities of the autism community: a systematic review of key stakeholder perspectives. *Autism* 25(2):336–48. <https://doi.org/10.1177/1362361320967790>
- Roestorf A, Bowler DM, Deserno MK, Howlin P, Klinger L, et al. 2018. “Older adults with ASD: the consequences of aging.” Insights from a series of special interest group meetings held at the International Society for Autism Research 2016–2017. *Res. Autism Spectr. Disord.* 63:3–12. <https://doi.org/10.1016/j.rasd.2018.08.007>
- Roper S, Charlton R, Happé F, Stewart GR. 2025. Self-harm and suicidality experiences of autistic and non-autistic adults in midlife and older age. Preprint, Research Square. <https://www.researchsquare.com/article/rs-6511234/v1>
- Rosen NE, Lord C, Volkmar FR. 2021. The diagnosis of autism: from Kanner to DSM-III to DSM-5 and beyond. *J. Autism Dev. Disord.* 51:4253–70. <https://doi.org/10.1007/s10803-021-04904-1>
- Seltzer MM, Krauss MW, Shattuck PT, Orsmond G, Swe A, Lord C. 2003. The symptoms of autism spectrum disorders in adolescence and adulthood. *J. Autism Dev. Disord.* 33(6):565–81. <https://doi.org/10.1023/B:JADD.0000005995.02453.0b>
- Shattuck PT, Seltzer MM, Greenberg JS, Orsmond GI, Bolt D, et al. 2007. Change in autism symptoms and maladaptive behaviors in adolescents and adults with an autism spectrum disorder. *J. Autism Dev. Disord.* 37(9):1735–47. <https://doi.org/10.1007/s10803-006-0307-7>
- Simonoff E, Kent R, Stringer D, Lord C, Briskman J, et al. 2020. Trajectories in symptoms of autism and cognitive ability in autism from childhood to adult life: findings from a longitudinal epidemiological cohort. *J. Am. Acad. Child Adolesc. Psychiatry* 59(12):1342–52. <https://doi.org/10.1016/j.jaac.2019.11.020>

- Stewart GR, Charlton RA, Wallace GL. 2018. Aging with elevated autistic traits: cognitive functioning among older adults with the broad autism phenotype. *Res. Autism Spectr. Disord.* 54:27–36. <https://doi.org/10.1016/j.rasd.2018.06.009>
- Stewart GR, Corbett A, Ballard C, Creese B, Aarsland D, et al. 2020a. Sleep problems and mental health difficulties in older adults who endorse high autistic traits. *Res. Autism Spectr. Disord.* 77:101633. <https://doi.org/10.1016/j.rasd.2020.101633>
- Stewart GR, Corbett A, Ballard C, Creese B, Aarsland D, et al. 2021. The mental and physical health profiles of older adults who endorse elevated autistic traits. *J. Gerontol. B* 76(9):1726–37. <https://doi.org/10.1093/geronb/gbaa112>
- Stewart GR, Corbett A, Ballard C, Creese B, Aarsland D, et al. 2022. Traumatic life experiences and post-traumatic stress symptoms in middle-aged and older adults with and without autistic traits. *Int. J. Geriatr. Psychiatry* 37(2). <https://doi.org/10.1002/gps.5669>
- Stewart GR, Corbett A, Ballard C, Creese B, Aarsland D, et al. 2023a. Self-harm and suicidality experiences of middle-age and older adults with versus without high autistic traits. *J. Autism Dev. Disord.* 53(8):3034–46. <https://doi.org/10.1007/s10803-022-05595-y>
- Stewart GR, Corbett A, Ballard C, Creese B, Aarsland D, et al. 2023b. The cognitive profile of middle-aged and older adults with high versus low autistic traits. *Autism Res.* 16(2):429–40. <https://doi.org/10.1002/aur.2866>
- Stewart GR, Luedecke E, Mandy W, Charlton RA, Happé F. 2024. Experiences of social isolation and loneliness in middle-aged and older autistic adults. *Neurodiversity* 2. <https://doi.org/10.1177/27546330241245529>
- Stewart GR, Wallace GL, Cottam M, Charlton RA. 2020b. Theory of mind performance in younger and older adults with elevated autistic traits. *Autism Res.* 13(5):751–62. <https://doi.org/10.1002/aur.2206>
- Taylor JL, Seltzer MM. 2010. Changes in the autism behavioral phenotype during the transition to adulthood. *J. Autism Dev. Disord.* 40(12):1431–46. <https://doi.org/10.1007/s10803-010-1005-z>
- Tomaszewski B, Klein CB, Meyer AT, Lamarche E, Klinger LG. 2025. Developmental trajectories of adaptive behavior from toddlerhood to middle adulthood in autism. *Autism Adulthood*. In press. <https://doi.org/10.1089/aut.2024.0036>
- Torenvliet C, Groenman AP, Agelink van Rentergem JA, Radhoe TA, Geurts HM. 2024. When mind and measurement diverge; the interplay between subjective cognitive complaints (SCCs), objective cognition, age, and depression in autistic adults. *Psychiatry Res.* 333:115759. <https://doi.org/10.1016/j.psychres.2024.115759>
- Torenvliet C, Groenman AP, Radhoe TA, Agelink van Rentergem JA, Geurts HM. 2023a. One size does not fit all: an individualized approach to understand heterogeneous cognitive performance in autistic adults. *Autism Res.* 16(4):734–44. <https://doi.org/10.1002/aur.2878>
- Torenvliet C, Groenman AP, Radhoe TA, Agelink van Rentergem JA, Van der Putten WJ, Geurts HM. 2022. Parallel age-related cognitive effects in autism: a cross-sectional replication study. *Autism Res.* 15(3):507–18. <https://doi.org/10.1002/aur.2650>
- Torenvliet C, Groenman AP, Radhoe TA, Agelink van Rentergem JA, Van der Putten WJ, Geurts HM. 2023b. A longitudinal study on cognitive aging in autism. *Psychiatry Res.* 321:115063. <https://doi.org/10.1016/j.psychres.2023.115063>
- van Heijst BF, Geurts HM. 2015. Quality of life in autism across the lifespan: a meta-analysis. *Autism* 19(2):158–67. <https://doi.org/10.1177/1362361313517053>
- Velikonja T, Fett AK, Velthorst E. 2019. Patterns of nonsocial and social cognitive functioning in adults with autism spectrum disorder: a systematic review and meta-analysis. *JAMA Psychiatry* 76(2):135–151. <https://doi.org/10.1001/jamapsychiatry.2018.3645>
- Viner HE, Yuill N, Costa AP, Radford H, Kornadt AE. 2024. A qualitative interview study on quality of life and ageing experiences of autistic adults. *Commun. Psychol.* 2(1):99. <https://doi.org/10.1038/s44271-024-00142-0>
- Vivanti G, Lee W-L, Ventimiglia J, Tao S, Lyall K, Shea LL. 2025. Prevalence of dementia among US adults with autism spectrum disorder. *JAMA Netw. Open* 8(1):e2453691. <https://doi.org/10.1001/jamanetworkopen.2024.53691>

- Vivanti G, Tao S, Lyall K, Robins DL, Shea LL. 2021. The prevalence and incidence of early-onset dementia among adults with autism spectrum disorder. *Autism Res.* 14(10):2189–99. <https://doi.org/10.1002/aur.2590>
- Waizbard-Bartov E, Miller M. 2023. Does the severity of autism symptoms change over time? A review of the evidence, impacts, and gaps in current knowledge. *Clin. Psychol. Rev.* 99:102230. <https://doi.org/10.1016/j.cpr.2022.102230>
- Wang J, Christensen D, Coombes SA, Wang Z. 2024. Cognitive and brain morphological deviations in middle-to-old aged autistic adults: a systematic review and meta-analysis. *Neurosci. Biobehav. Rev.* 163:105782. <https://doi.org/10.1016/j.neubiorev.2024.105782>
- Wallace GL, Said AJ, McQuaid GA. 2025. Elevated parkinsonism symptoms in autism during middle and older adulthood are linked with psychosocial, physical health, and mental health outcomes. *Autism Res.* 18(1):98–109. <https://doi.org/10.1002/aur.3274>
- Weir E, Allison C, Ong KK, Baron-Cohen S. 2021. An investigation of the diet, exercise, sleep, BMI, and health outcomes of autistic adults. *Mol. Autism* 12(1):31. <https://doi.org/10.1186/s13229-021-00441-x>
- Wise EA. 2020. Aging in autism spectrum disorder. *Am. J. Geriatr. Psychiatry* 28(3):339–49. <https://doi.org/10.1016/j.jagp.2019.12.001>
- Woodman AC, Smith LE, Greenberg JS, Mailick MR. 2015. Change in autism symptoms and maladaptive behaviors in adolescence and adulthood: the role of positive family processes. *J. Autism Dev. Disord.* 45(1):111–26. <https://doi.org/10.1007/s10803-014-2199-2>
- Zivralı Yazar E, Howlin P, Charlton R, Happé F. 2020. Age-related effects on social cognition in adults with autism spectrum disorder: a possible protective effect on theory of mind. *Autism Res.* 14(5):911–20. <https://doi.org/10.1002/aur.2410>
- Zivralı Yazar E, Roestorf A, Spain D, Howlin P, Bowler D, et al. 2022. Aging and autism: Do measures of autism symptoms, co-occurring mental health conditions, or quality of life differ between younger and older autistic adults? *Autism Res.* 15(8):1482–94. <https://doi.org/10.1002/aur.2780>