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Abstracts

Systematic Review of the Literature

Individuals with hoarding disorder (HD) experience persistent difficulties in parting with possessions and an accumulation of belongings that compromise the use of living spaces, in addition to associated distress and impaired quality of life. Some evidence suggests a link between HD and neurodivergence; particularly autism and attention deficit hyperactivity disorder (ADHD). However, the prevalence of co-occurrence, extent of common vs distinct characteristics, and shared psychological maintenance factors are all unclear. This systematic review identified 19 papers from 2013 onwards which examined the relationship between HD, autism and/or ADHD. A consistent relationship between ADHD *traits*, particularly inattentiveness, and hoarding behaviours was identified. ADHD traits were not endorsed by all with HD, and vice versa. No clear shared or distinct underlying or maintenance mechanisms were identified, although heightened impact on mental health and functioning was found in groups with co-occurring ADHD and HD. Few studies examined HD and autism; some evidence suggests increased prevalence of autistic traits in HD groups, and vice versa. Future research exploring common mechanisms between HD and neurodivergence is needed. The review supports a clear relationship between inattention and hoarding behaviours at a trait level which has implications for screening, recognition of difficulties and intervention. Limitations of the review are discussed.

Service Improvement Project

Autistic people are more likely to experience poor mental health than non-autistic people. Limited staff knowledge and training about autism have been identified as possible barriers to effective mental health support. The Doctorate in Clinical Psychology is a three-year training

course. An online survey was conducted to evaluate trainee and recently graduated clinical psychologist (n=44) and staff members (n=16) knowledge about autism, and self-perceived competence and confidence when working with autistic people. Strengths and gaps of current autism-related teaching within the course were explored. Staff focus groups (n=9) were conducted to explore perceived barriers and facilitators of autism-related teaching within the curriculum. The majority of participants recognised that autism-related teaching needs improvement. Five themes were identified in online survey data: 1) Nothing about us without us, 2) Adults can be autistic too, 3) The Space Time Conundrum, 4) "Conscious Incompetence", and 5) The EDI umbrella. A further five themes were identified in focus group data: 1) It's a massive jigsaw, 2) The topic of autism is a 'minefield', 3) It's not in my job description, 4) Teaching reflecting clinical issues, and 5) Diverse experiences or part of diversity. Recommendations, limitations and reflections are discussed.

Theory Driven Research Project

Evidence suggests that autistic people are overrepresented in homelessness populations and may experience barriers to support. This study aimed to explore the extent to which staff working in homelessness services recognise autism in service users, and whether staff consider making adaptations to support. A total of 203 staff working face-to-face with people experiencing homelessness in a homelessness service in the UK completed an online survey. Participants were asked to identify a mental health or neurodevelopmental condition within five co-produced vignettes of hypothetical service users depicting 1) traditional autism presentation, 2) nuanced autism presentation, 3) psychosis, 4) emotionally unstable personality disorder (EUPD), 5) no co-occurring condition. Participants were most accurate at identifying traditional presentations of autism and least accurate at identifying EUPD. Personal and professional connection and experience did not predict accuracy, nor whether

participants would make adaptations to support. The results suggest that improvements to the recognition of nuanced autism is needed. Future research is needed to explore the implementation of adaptations, and service users' experience of adaptations.

The Relationship Between Neurodivergence And Hoarding: A Systematic Review Examining Autism And Attention Deficit Hyperactivity Disorder in Hoarding Disorder.

Doctorate in Clinical Psychology

Systematic Review of the Literature

Word count: 6685

Date of report: 19th May 2025

Proposed Journal: Journal of Obsessive-Compulsive and Related Disorders as this is an international journal specialising in OCRDs, including hoarding. They invite systematic review manuscripts for review on classification of related conditions.

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Abstract

Individuals with hoarding disorder (HD) experience persistent difficulties in parting with possessions and an accumulation of belongings that compromise the use of living spaces, in addition to associated distress and impaired quality of life. Some evidence suggests a link between HD and neurodivergence; particularly autism and attention deficit hyperactivity disorder (ADHD). However, the prevalence of co-occurrence, extent of common vs distinct characteristics, and shared psychological maintenance factors are all unclear. This systematic review identified 19 papers from 2013 onwards which examined the relationship between HD, autism and/or ADHD. A consistent relationship between ADHD *traits*, particularly inattentiveness, and hoarding behaviours was identified. ADHD traits were not endorsed by all with HD, and vice versa. No clear shared or distinct underlying or maintenance mechanisms were identified, although heightened impact on mental health and functioning was found in groups with co-occurring ADHD and HD. Few studies examined HD and autism; some evidence suggests increased prevalence of autistic traits in HD groups, and vice versa. Future research exploring common mechanisms between HD and neurodivergence is needed. The review supports a clear relationship between inattention and hoarding behaviours at a trait level which has implications for screening, recognition of difficulties and intervention. Limitations of the review are discussed.

Keywords: Hoarding Disorder; Autism; ADHD; Neurodivergence, Inattention

Previously conceptualised as a sub-type of Obsessive-Compulsive Disorder (OCD), Hoarding Disorder (HD) is now recognised as a separate category in the Diagnostic and Statistical Manual of Mental Disorders – fifth edition (DSM-5;American Psychiatric Association, 2013). Diagnostic criteria for HD include persistent difficulties and associated distress when discarding or parting with possessions regardless of their value, a perceived need to "save" personal possessions, and the accumulation of possessions compromising the intended use of living area(s). HD is thought to affect approximately 2.5% of the population (Postlethwaite et al., 2019). It has been suggested that hoarding may be best conceptualised as a final common pathway, where multiple factors can result in the accumulation of belongings resulting in living space being made inaccessible for its normal function. Gordon et al. (2013) suggest that belief dimensions including harm avoidance, fear of future deprivation and attachment abnormalities can all result in hoarding. It has also been suggested that neuropsychological factors such as information processing deficits may be involved in the development and maintenance of hoarding (Grisham & Baldwin, 2015).

Several studies have sought to identify a significant overlap between traits, predisposing, and perpetuating factors associated with HD and neurodivergent populations. This review focuses on the overlap with HD and two neurodivergent conditions: autism spectrum disorder (henceforth referred to as autism) and Attention Deficit Hyperactivity Disorder (ADHD). Consideration of the traits characterising such neurodivergence suggests possible mechanisms through which hoarding may manifest in people with these conditions.

Autism is characterised by two key areas of difference: 1) social interaction and communication and 2) restricted and repetitive behaviours and sensory differences (American Psychiatric Association, 2013). Approximately 1% of the world population have a diagnosis of autism (Zeidan et al., 2022); the true prevalence is likely to be higher due to the widely reported barriers to diagnosis and increasing diagnoses in adulthood indicating "missed"

diagnoses (Fusar-Poli et al., 2022). An elevated prevalence (7.4%) of autism was identified in a sample of university students with hoarding behaviours, relative to 4.1% without such behaviour (Kajitani et al., 2019). Several studies have also suggested an inflated prevalence of hoarding behaviours in autistic people relative to the general population; Storch et al. (2016) identified moderate hoarding behaviours in 27.5% of a sample of 40 autistic young people, and La Buissonnière-Ariza et al. (2018) identified moderate hoarding behaviours in 34% of a sample of 204 autistic children. In contrast, Akıncı et al. (2022) estimated the prevalence of hoarding disorder in children and adolescence in the general population as 0.98%.

It has been suggested that hoarding behaviour in autistic samples may be related to the diagnostic criteria of restricted and repetitive behaviours and interests (RRBIs; Antezana et al., 2019; Goldfarb et al., 2021). Many autistic people have strong passions and interests that persist in their intensity and longevity (Anthony et al., 2013). Another factor may be the tendency towards preservation of sameness which may lead to reluctance to discard belongings. A qualitative study conducted by Goldfarb et al. (2021) interviewed 10 autistic adults about their experiences of hoarding. The participants identified three key motivations for hoarding: the use of objects as emotional aids, difficulties parting ways with objects and, collecting objects associated with a special interest. The findings suggest that, in addition to RRBI traits, emotional and executive functioning factors may play a role in the occurrence of hoarding behaviours in autism. Interestingly, correlates of hoarding behaviour in these populations included attention-deficit and hyperactivity symptoms (La Buissonnière-Ariza et al., 2018; Storch et al., 2016).

ADHD is also characterised by executive functioning differences and difficulties, particularly by a persistent pattern of inattention and/or hyperactivity and impulsivity that impacts a persons' social and occupational functioning (American Psychiatric Association,

2013). The estimated global prevalence of ADHD is 5% (Popit et al., 2024). In a sample of 217 people with HD, 28% were found to have co-occurring ADHD (Frost et al., 2011). Similarly, a higher prevalence of hoarding behaviours was found in participants with ADHD (8.9%) compared to those without ADHD (2.7%; Fullana et al. 2013). Inattention is prominent in both ADHD and hoarding behaviour (Gledhill et al., 2021; Hacker et al., 2016; Lynch et al., 2015). It is unclear then, why some individuals with inattention ADHD symptoms do not engage in hoarding behaviours. It is likely that inattentive traits alone, although related, are neither necessary nor sufficient in the onset of HD.

Other characteristics which have been identified in both HD and autism and/or ADHD include atypical emotional attachment to belongings (Goldfarb et al., 2021; J. R. Grisham et al., 2018; Yap & Grisham, 2019), tendency to anthropomorphise (Clutterbuck et al., 2022; White & Remington, 2019), difficulties with executive functioning (Gledhill et al., 2021; Kofler et al., 2020; Lai et al., 2017), problems with emotion regulation (Christiansen et al., 2019; Cibralic et al., 2019; Timpano & Port, 2021; Tolin, Levy, et al., 2018) and difference/impaired interpersonal skills (J. R. Grisham et al., 2018; Kathju, 2021). Furthermore, limited social support and loneliness is often reported in both neurodivergent and HD populations (Caruana et al., 2021; Edwards et al., 2023; Mastoras et al., 2018; Moseley et al., 2021; Yap et al., 2023).

All three conditions (HD, autism, ADHD) are diagnosed by behavioural markers gathered through in-depth developmental histories, clinical interviews and observation, and there may be some overlapping criteria. As there are no consistent neurobiological or neuropsychological diagnostic tools, the relationship between neurodivergence and hoarding behaviours remains unclear. A key question is whether hoarding behaviours identified in neurodivergent people represent a core feature of ADHD and autism, or are co-occurring

conditions with neurodivergence increasing the likelihood of, rather than being integral to HD.

The factors described above point to the need for a synthesis of the relationship and underlying common mechanisms between hoarding and neurodivergence. In particular, to clarify whether hoarding behaviours/disorder are an outcome of autism and/or ADHD, or a distinct co-occurring condition with overlapping predispositions.

Review Questions:

1. What is the prevalence of co-occurring neurodivergence and hoarding disorder?
2. What are the overlapping and distinct characteristics of hoarding disorder, ADHD and autism?
3. What psychological factors have been found to underlie and/or maintain both neurodivergence (ADHD, autism) and hoarding disorder?

Methods

The review protocol was developed a priori and registered at PROSPERO Centre for Reviews and Disseminations (ID CRD42024576693).

Search Strategy

Four electronic databases (PsycInfo, MEDLINE, Scopus, Web of Science) were searched with data restriction of papers published in or after 2013. This data restriction was selected due to Hoarding Disorder being formally included in the Diagnostic and Statistical Manual (DSM) Fifth Edition in this year (American Psychiatric Association, 2013). The

search was initially conducted on 3rd September 2024 and updated on 12th May 2025. The search strategy was as follows:

("hoarding disorder" OR "compulsive hoarding" OR hoard* OR "difficulty discarding")

AND

("neurodiver*" OR "autis*" OR "ASD" OR "ASC" OR "Autism Spectrum Disorder" OR "Asperger*" OR "Attention Deficit Hyperactivity Disorder" OR "ADHD" OR "ADD")

The search strategy was developed by the authors and reviewed by a librarian to determine its appropriateness and thoroughness.

Inclusion Criteria:

- Studies published in peer-reviewed journals from 2013 onwards
- Study participants aged 18 years or above
- Full text available
- Available in English
- Includes a validated measure of hoarding symptomology OR a confirmed diagnosis of hoarding disorder
- Includes a validated measure of autistic traits and/or ADHD traits, OR participants have a clinical diagnosis of autism and/or ADHD

Exclusion Criteria:

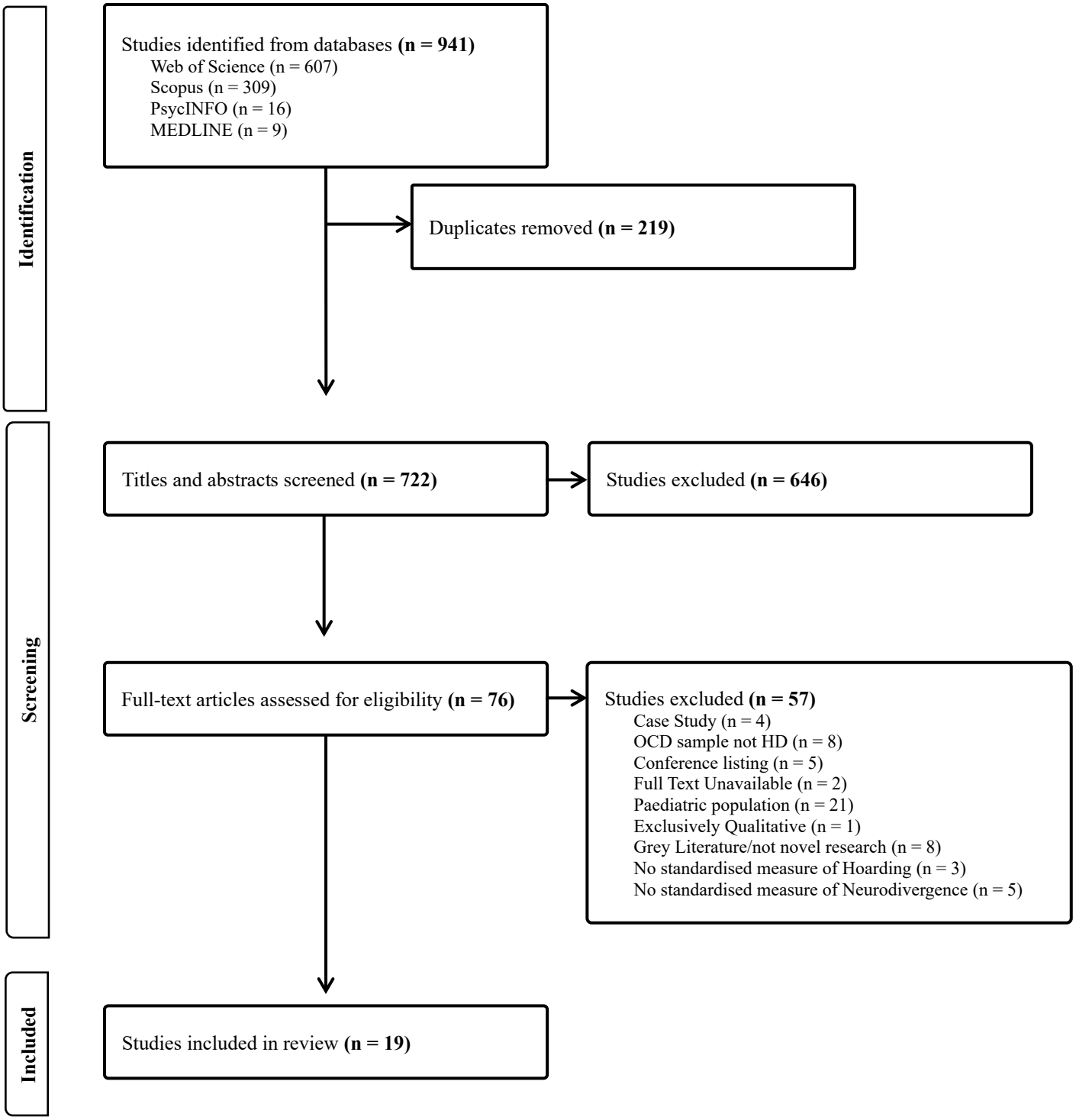
- Grey literature
- Studies focusing on animal hoarding
- Non-human sample
- Pharmacological intervention studies

- Genetic or neuroimaging studies
- Exclusively qualitative studies

Data screening

Search results from each database were imported into an online systematic review management platform, Covidence, to facilitate the screening process and collaboration between reviewers. The majority of duplicates were automatically identified and removed after import; a small proportion of duplicates were not identified due to differences in the title case (e.g. capital letters used throughout), these were manually identified throughout the screening process.

Figure 1- PRISMA flow diagram



In line with PRISMA guidelines, the first stage of screening included title and abstract. The second stage of screening included full text screening against inclusion criteria. At both screening stages, all papers were screened by the first author (VM) and 20% (n=144, n=15 respectively) were screened by the second author (ZF). Discrepancies (n = 2) were noted and resolved through discussions. No third-party decision was required following this process.

Data extraction, analysis and synthesis

Data extraction was completed using Microsoft Excel. The following data were extracted from each included paper: 1) publication details (e.g. title, authors, year), 2) study design (e.g. country, aim, design, sample size, recruitment, inclusion/exclusion criteria), 3) participant information (e.g. age, gender, diagnosis, ethnicity), 4) methodology (e.g. measures of HD, ADHD, and/or autism), 5) analysis method, 6) results (e.g. prevalence of ADHD/autism in HD sample and vice versa, group differences/similarities).

The first author (VM) extracted data from all of the included papers; data from 50% of the included papers were extracted by the second author (ZF) and compared for consistency. No discrepancies were noted.

A meta-analysis was not conducted due to the large variation in study design and analyses used. Data is synthesised here as a narrative synthesis of the included papers, taking into consideration the quality of the studies. The synthesis was initiated with a textual description of each included study, followed by grouping studies by the sample type (e.g. participants with HD, participants with ADHD, autistic participants). Tabulation took place in the data extraction phase and data is presented in Table 1. A vote-counting technique was used to determine the number of studies with significant and non-significant findings addressing the research question (e.g. demonstrating the relationship between HD and autism/ADHD. The

authors triangulated studies to determine whether heterogeneity across findings can be explained by methodology (Centre for Reviews and Dissemination., 2008). Where there is no cross over between studies aims or findings, individual studies are summarised, and the authors have identified areas for future research needed to address the review question. Effect sizes have been reported, where available, to facilitate comparison between study results and interpretation of findings.

Quality Analysis

Methodological quality of the included papers was determined via the Critical Appraisal Skills Programme (CASP; 2018; See Appendix A) checklist for cross-sectional studies. A numerical scoring system was put in place in order to compare the quality of papers; a score of 1 was given if the paper provides evidence for each criterion, 0.5 is given if it is not possible to tell, and 0 was given if there was evidence that the criteria is not supported. The maximum total was 11.

The first author conducted quality assessment on all of the included papers, the second author completed quality assessment on 53% (n=10) of the included papers to determine consistency. Of the ten papers, three differed in score by 0.5 each due to disagreements of 1) whether participants were recruited in an acceptable way (n=1), 2) whether results can be applied to the local population (n=2). For all of these discrepancies, the first author had put '0' – no, and the second author had put '0.5' – can't tell. The authors met to discuss the discrepancies and agreed on final scores collaboratively.

Results

Description of included papers

A total of 19 papers are included in this review published between 2013 -2024 (see Table 1). This includes a summed total of 23,298 participants. As described in the method section of the included papers, the combined samples include n=1099 participants with a clinical diagnosis or scored above clinical cut off on a standardised measure of Hoarding Disorder; data regarding clinical diagnoses of autism and ADHD were limited, thus prevalence is discussed in relation to hypothesis one below.

The majority of papers (n=15) focused on the relationship between ADHD and HD, one focused on autism and HD, and three focused on ADHD, autism and HD.

All of the included papers were cross-sectional studies. Seven studies included a comparison group of a non-clinical control group (Baldwin et al., 2018; Diefenbach et al., 2013; Fitch & Cougle, 2013; Hallion et al., 2015; Morein-Zamir et al., 2022; Sordo Vieira et al., 2022; Woody et al., 2021), three included both non-clinical controls and OCD groups (Grassi et al., 2023; Kuwano et al., 2020; Worden & Tolin, 2023).

Grassi et al. (2024) compared two groups with diagnosed ADHD with/without HD, and healthy controls. Abouzed et al. (2024) explored HD traits in a sample of autistic adults. Kajitani et al. (2019) compared groups of participants with/without HD, ADHD, and/or autism; group membership was determined based on cutoff scores from trait measures collected as part of the study and not formal diagnoses. Hall et al. (2013) explored group difference between a sample with HD only and a sample of HD +ADHD determined by cutoff scores collected during the study. Frost et al. (2013) compared a sample of current acquirers with a sample of past acquirers, all of whom had a diagnosis of HD. Fullana et al. (2013) compared participants who met diagnostic criteria for ADHD in childhood, compared with those who met criteria for HD.

Three studies explored associations between traits and not diagnostic group differences (Ashworth & McCown, 2018; Woerner et al., 2017; Xu et al., 2015).

Table 1.
Summary of included studies

Citation	Country(s)	Neurodivergent Condition	Study Aim	Sample	Autism/ADHD measure used	Hoarding Measure used	Key Finding
Abouzed et al (2024)	Egypt	Autism	To explore the relationship between hoarding and autism	n=112 autistic adults with "high functioning" autism diagnoses	AQ-50 (Baron-Cohen et al., 2001)	SI-R (Frost et al., 2004)	Moderate levels of HD traits. Significant associations between HD and autism traits, specifically increased clutter and higher attention to detail, increased difficulty discarding and lower social skills, and increased acquiring and lower communication skills Demographic factors identified

							as predictors of hoarding.
Ashworth et al (2018)	USA	ADHD	To examine the relationship between procrastination, hoarding and ADHD using a continuous performance task.	n = 84 referred to an adult ADHD clinic with no history of childhood ADHD.	IVA + CPT (Sandford & Turner, 2004); ASRS (Kessler et al., 2005)	SI-R (Frost et al., 2004)	Higher hoarding behaviour associated with poorer attention for visual, but not auditory, stimuli.
Baldwin et al (2018)	Australia	ADHD	To examine self-reported and neuropsychological traits of ADHD in participants with HD compared to controls.	total n = 33; n = 17 HD group, n = 16 healthy controls	ASRS (Kessler at al., 2005)	SI-R (Frost et al. 2004); SCI(Steketee et al., 2003); HRS-I (Tolin et al., 2010), MINI-6 (Sheehan et al., 1998).	HD group > control group for inattention and hyperactivity traits. Only inattention significantly predicted hoarding.
Diefenbach et al (2013)	USA	ADHD	Explore the clinical characteristics of hoarding in older adults.	total n = 210 aged 20-78 years; subset n= 55 older adults (60 years+) with HD; n= 39 older adults without HD	ADHD-SS (Barkley & Murphy, 1998)	SI-R (Frost et al., 2004); SCI (Steketee et al., 2003); HRS-I (Tolin et al., 2010) CGI (Guy, 2017)	HD group > controls for attention difficulties

Fitch et al (2013)	USA	ADHD	To compare participants with and without non-clinical levels of hoarding on measures of ADHD traits and executive functioning.	total n = 73, n= 36 nonclinical hoarders and n = 37 controls.	ADHD-SS (Barkley & Murphy, 1998); BIS-11 (Patton et al., 1995)	HRS-I (Tolin et al., 2010); SI-R (Frost et al., 2004)	In adulthood: Hoarding group > control group for indecisiveness, inattention, hyperactivity/impulsivity. In childhood: Hoarding group > controls hyperactivity/impulsivity only.
Frost et al (2013)	USA	ADHD	To compare participants with HD who currently excessively acquire items with past acquirers on measures of hoarding, ADHD and other related factors.	total n = 838; n = 369 in HD group; n = 469 relatives of individuals with HD (independent of HD group)	ADHD-SS (Barkley & Murphy, 1998)	HRS-SR (Tolin et al., 2010); HRS-F (Tolin et al., 2010); SI-R (Frost et al., 2004), SI-R-F (Steketee et al., in press)	Inattention score predicted hoarding behaviour/traits.
Fullana et al (2013)	Belgium, France, Germany, Italy, the Netherlands, Northern Ireland,	ADHD	Investigate the association between retrospectively reported ADHD symptoms in	n = 2963 recruited from the World Health Organisation survey initiative; n = 129 (3.2%) met criteria for HD; n=63 (1.7%) met	CIDI 3.0 (Kessler et al., 2004)	CIDI 3.0 (Kessler et al., 2004)	Prevalence of lifetime hoarding and childhood ADHD = 10.9%. Inattention symptoms, but not hyperactivity,

	Portugal, Romania, and Spain		childhood and lifetime hoarding symptoms.	criteria for childhood ADHD.			significantly associated with lifetime hoarding.
Grassi et al (2023)	Italy	ADHD	To compare HD traits in a sample of participants with ADHD, OCD and healthy controls.	total n =157; n= 57 in ADHD group, n= 50 in OCD group, n = 50 Healthy controls.	BAARS-IV (Barkley, 2011)	SI-R (Frost et al. 2004)	Prevalence of ADHD and HD = 31.10% (n=18). ADHD groups > OCD group and controls for hoarding behaviours. ADHD+HD > ADHD only for inattention scores and poorer daily functioning.
Grassi et al (2024)	Italy	ADHD	To investigate clinical and neurocognitive features of adult ADHD+HD patients	ADHD+HD = 57, ADHD-HD = 57, HC = 47	BAARS-IV (Barkley, 2011)	SI-R (Frost et al. 2004)	ADHD+HD greater errors on attentional tasks and executive functioning measures compared to ADHD only

Hall et al (2013)	USA	ADHD	To explore co-occurring psychiatric symptoms in participants who self-report hoarding difficulties.	n = 363 self-identified hoarders	ADHD-SS (Barkley & Murphy, 1998)	HRS-SR (Tolin et al., 2008); SI-R (Frost et al,. 2004) ; HEI (Rasmussen et al., 2014); HBI (Hall et al., 2013)	Three classes of HD. Prevalence of HD+ADHD = 16%. HD+ADHD > HD only and HD+ Depression for disgust, squalor, poorer functioning. HD+ groups > HD only for impulsivity, obsessions, stress and emotional reactivity.
Hallion et al (2015)	USA	ADHD	To test the role of poor memory confidence in the relationship between inattention, hoarding and related impairment.	total n = 58; n= 32 adults with HD, n=36 age matched controls	ADHD-SS (Barkley & Murphy, 1998)	DIAMOND (Tolin, Gilliam, et al., 2018); HRS-I (Tolin et al., 2010); SI-R (Frost et al., 2004); SCI (Steketee et al., 2003);	HD group > controls for inattention. Poor memory confidence model supported. Inattention has indirect impact on clutter and impairment.

Kajitani et al (2019)	Japan	ADHD; Autism	To examine the correlations between hoarding behaviour and developmental disorder traits.	n= 801 university students	ASRS - Japanese Version (Kessler at al., 2005); AQ16 - Japanese Version	CIR (Frost et al., 2008)	HD+ group > HD - group for ADHD co-occurrence (40.7% vs. 21.7%). ADHD+ > ADHD - for HD co-occurrence (6.1% vs 2.6%). HD+>HD - for autism, but not significant (7.4% vs 4.1%), ASD+ > ASD- for HD (5.9% vs. 3.3%) but not significant.
Kuwano et al (2020)	Japan	ADHD; Autism	Compare the clinical characteristics of patients with HD compared to those with OCD and healthy controls.	total n = 71; n = 30 HD group; n = OCD group; n = 21 control group	CAADID (Epstein & Kollins, 2006); CAARS (Conners et al., 2012); ASRS (Kessler at al., 2005); AQ (Baron-Cohen et al., 2001; Wakabayashi et al., 2004).	SIHD (Nordsletten et al., 2013); CIR (Frost et al., 2008), SI-R (Frost et al., 2004)	Prevalence of HD + ADHD = 26.7%. HD> OCD for ADHD. HD> both OCD and controls for all measures of ADHD traits. HD>controls, HD = OCD groups for autistic traits.

Morein-Zamir et al (2022)	UK	ADHD	Investigate characteristics of hoarding behaviour in a sample of adults with ADHD.	total n= 178; n= 88 (49.43%) ADHD group, n = 90 age and gender matched control group	Structured clinical interview with self and informant; BAARS-IV (Barkley, 2011); MINI-6 (Sheehan et al., 1998); ASRS (Kessler at al., 2005); BIS - 11 (Patton et al., 1995)	SI-R (Frost et al., 2004) ; CIR (Frost et al., 2008)	ADHD > controls for all hoarding behaviours. ADHD+HD > ADHD only for inattention, depression, anxiety, parental criticism, functional impairment. ADHD+HD = ADHD for hyperactivity/impulsivity. Inattention predicted hoarding in ADHD group only. 17/88 ADHD group also had HD.
SordoVieira et al (2022)	USA	ADHD	Examine the relationship between hoarding and psychiatric and neurological disorders using network analysis.	total n = 15978 recruited from the Brain Health Registry; n = 135 probable/definite HD; n=117 comparison group without HD.	Self-reported diagnosis	HRS-I (Tolin et al., 2010) ; MINI (Sheehan et al., 1998), Y-BOCS (Goodman, 1989); SIHD (Nordsletten, et al., 2013), SI-R (Frost et al., 2004); UHSS	Significantly strongest association in network analysis = HD and ADHD. HD group > subclinical and control for ADHD.

						(Saxena et al., 2015).	
Woerner et al (2017)	USA	ADHD	Explored the nature of hoarding behaviour in relation to ADHD and diagnoses under the obsessive-compulsive diagnostic category.	n = 578 undergraduate students	ASRS (Kessler at al. 2005)	SI-R (Frost et al. 2004)	Hoarding behaviours associated with OCRDs, anxiety and ADHD. Poorest model fit between ADHD and HD only.
Woody et al (2021)	Canada	ADHD	To compare the effect of a cluttered vs standard testing environment on performance on a continuous attention task.	total n = 162; n= 54 (33.33%) met criteria for HD; n=60 in health control group; remaining included in dimensional analysis	ASRS-6 (Ustun et al., 2017)	MINI(Sheehan et al., 1998); CIR (Frost et al., 2008); SI-R (Frost et al., 2004)	HD > controls for depression and ADHD traits.

Worden et al (2023)	USA	ADHD	To compare childhood and adulthood ADHD symptoms between groups of participants with HD, OCD and healthy controls.	total n= 212; n = 149 HD Group; n= 29 OCD group; n= 34 health controls	ADHD-SS (Barkley & Murphy., 1998)	DIAMOND interview and HRS-I (Tolin et al., 2010; Tolin, Gilliam, et al., 2018); SI-R (Frost et al., 2004)	Prevalence of HD + ADHD = 27.1%. HD group > OCD and controls for inattention. HD > controls for hyperactivity.
Xu et al (2015)	China	Autism	Explore the relationship between hoarding behaviour and autism and the role of anxiety and depression in this relationship.	N = 3229 university students	AQ-50 (Baron-Cohen et al., 2001)	SI-R (Frost et al., 2004)	Autistic traits significantly predicted hoarding behaviours. Depression and anxiety were mediators.

Notes: ADHD = Attention Deficit Hyperactivity Disorder; ADHD-SS = Attention Deficit Hyperactivity Disorder Symptom Scale; ASRS = Adult ADHD Self-Report Scale; AQ-50 = Autism Quotient; BAARS-IV = Barkley Adult ADHD Rating Scale; BIS-11 = Barratt Impulsiveness Scale; CAADID = Conners' Adult ADHD Diagnostic Interview for DSM-IV; CAARS = Conners' Adult ADHD Rating Scales; CIDI 3.0 = Composite International Diagnostic Interview; CGI = Clinical Global Impression; CI-R = Clutter Image Rating Scale; DIAMOND= Diagnostic Interview for Anxiety, Mood, and OCD and Related Neuropsychiatric Disorders; HBI =Hoarding Behaviour Inventory; HD = Hoarding Disorder; HEI = Home Environment Index; HRS-I = Hoarding Rating Scale - Interview; IVA+CPT = Integrated Visual and Auditory Continuous Performance Test; MINI = Mini-International Neuropsychiatric Interview; OCD = Obsessive Compulsive Disorder; OCRDS = Obsessive Compulsive Related Disorders; SCI = Savings Cognition Inventory; SI-R = Saving Inventory - Revised ; SIHD = Structured Interview for Hoarding Disorder; UHSS = UCLA Hoarding Severity Scale; USA = United States of America; Y-BOCS = Yale-Brown Obsessive Compulsive Scale

Quality Assessment

Table 2 summarises the methodological quality of the included studies. Methodological quality ranged from 31.82% to 95.45%. No cut off scores are provided to determine high/moderate/low quality when using the CASP, however, nine studies scored above 75%, six studies scored between 50% and 75%, two studies score between 25% and 50%. For the purpose of this report, studies in each of the aforementioned categories will be labelled high, moderate or low quality, respectively. However, these labels are not validated and should be considered with caution.

Importantly, none of the studies included an *a priori* power analysis, and therefore it was not possible to determine whether the samples were sufficiently powered to detect meaningful effects.

Table 2

Summary of scores from the CASP Cross-Sectional Checklist

Author (Year)	Total CASP score (max = 11)	Percentage	Rating
Abouzed et al (2024)	7	63.64	Moderate
Ashworth et al (2018)	3.5	31.82	Low
Baldwin et al (2018)	9	81.82	High
Diefenbach et al (2013)	4	36.36	Low
Fitch et al (2013)	8	72.73	High
Frost et al (2013)	8	72.73	High
Fullana et al (2013)	9.5	86.36	High
Grassi et al (2023)	7.5	68.18	Moderate
Grassi et al (2024)	9	81.82	High
Hall et al (2013)	7.5	68.18	Moderate

Hallion et al (2015)	9	81.82	High
Kajitani et al (2019)	6	54.55	Moderate
Kuwano et al (2020)	6.5	59.09	Moderate
Morein-Zamir et al (2022)	10.5	95.45	High
SordoVieira et al (2022)	10	90.91	High
Woerner et al (2017)	9	81.82	High
Woody et al (2021)	9.5	86.36	High
Worden et al (2023)	8	72.73	Moderate
Xu et al (2015)	5.5	50.00	Moderate

What is the prevalence of co-occurring neurodivergence and hoarding disorder?

Three included papers of moderate quality reported the prevalence of co-occurring ADHD and HD. Prevalence of ADHD in HD samples ranged from 26.7% to 40.7% (Kajitani et al., 2019, Kuwano et al., 2020; Worden & Tolin., 2023). In samples of ADHD participants, prevalence of hoarding ranged from 1.13% to 32.1% (Morein-Zamir et al., 2022; Kajitani et al., 2019; Grassi et al., 2023; Worden & Tolin., 2023). Methodological differences across studies may offer an explanation for the range of prevalence; using clinical cut-off on self-report measures resulted in higher prevalence estimates, whereas pre-existing clinical diagnoses of ADHD or HD resulted in lower prevalence estimates.

None of the included papers reported prevalence of co-occurring autism and HD using clinical diagnoses. When using clinical cut off scores on self-report measures, Kajitani et al. (2019) reported 5.9% of autistic participants had co-occurring HD, and 7.4% of participants with HD were autistic.

The majority of included studies explored the relationship between HD and neurodivergence at a trait level and did not report prevalence. Therefore, summarised below

is a synthesis of findings answering the question “to what extent are hoarding behaviours and neurodivergent traits related”.

To what extent are hoarding behaviours and neurodivergent traits related?

The majority of included studies found a significant positive relationship between ADHD traits and hoarding behaviours across samples (e.g. clinical, non-clinical, ADHD vs HD samples) and study designs (epidemiological, cross-sectional).

Five studies analysed group difference in HD groups compared to comparator groups. When using this design, HD groups consistently had significantly greater traits of ADHD compared to comparison groups (typically OCD, non-hoarding control or both groups), with effect sizes ranging from $\eta^2_p = 0.14$ to 0.79 (Diefenbach et al., 2013; Fitch & Cougle, 2013; Fullana et al., 2013; Woody et al., 2021; Worden & Tolin, 2023). HD traits were also significantly higher in ADHD groups compared to non-ADHD groups, with an effect size of d= 1.02 (Morein-Zamir et al., 2022)

Higher levels of inattention were significantly related to increased hoarding behaviours across studies (effect sizes ranged from $\beta = 0.21$ to 0.46; Frost et al., 2013; Baldwin et al., 2018; Sordo Vieira et al., 2022; Woerner et al., 2017). Compared to inattention, findings regarding the relationship between HD and hyperactivity were less consistent. In clinical samples, groups with HD did not significantly differ to comparator groups in regard to hyperactivity (Morein-Zamir et al., 2022; Worden & Tolin., 2023). However, in community samples, two studies found significant differences hyperactivity symptoms when comparing those with above clinical cut-off hoarding behaviours and non-hoarders (effect size $\eta^2_p = 0.42$; Baldwin et al., 2018; Fitch & Cougle., 2013). Associations between hyperactivity and hoarding were also less strong (albeit significant) compared to inattention (r=0.147 vs r=.283; Kajitani et al., 2019).

The above findings suggest that the presence of ADHD traits in adulthood is related to hoarding behaviours. Studies examining traits across the lifespan support this (Fitch & Cougle., 2013; Fullana et al., 2013; Worden & Tolin, 2023). ADHD traits in childhood are reported to be less related to lifetime hoarding. Studies including clinical and community samples noted that childhood traits do not differentiate sample groups of hoarders and non-hoarders (Fitch & Cougle., 2013;Worden & Tolin, 2023). In community samples, isolated childhood traits, particularly hyperactivity/impulsivity are reported to predict lifetime hoarding, whereas clinical diagnoses of ADHD do not (Fitch & Cougle., 2013; Fullana et al., 2013). It should be held in mind that childhood traits in all of these studies were retrospectively reported which limits the validity and ability to draw conclusions. Differences in findings may be explained by limited participant recall.

Four studies explored the relationship between autism and hoarding. One study explored group differences and found significantly higher autistic traits in a HD group compared to a non-clinical control group (Cohen's d = 1.328), but not OCD group (Kuwano et al., 2020). Three studies found significant, but weak, associations between hoarding behaviours and autistic traits (Pearson r =0.194 to r= 0.37 ; Abouzed et al., 2024; Kajitani et al., 2019; Xu et al., 2015).

Taken together, the relationship between hoarding and ADHD appears to be consistent across different clinical samples and methodologies. ADHD traits, particularly inattention, appears to be consistently related to hoarding behaviours in adulthood; ADHD traits were

elevated across HD populations. Hoarding behaviours may be more prevalent in samples of people with ADHD compared to non-ADHD samples. Studies investigating the relationship between autism and hoarding provide preliminary evidence of a significant, but weak, positive association between autistic traits and hoarding behaviours . The relationship appears to be dependent on study design; prevalence estimates are higher when using clinical cut offs from self-report measures, in comparison to clinical pre-existing diagnoses. Authors may have selected this methodology to overcome barriers to accessing diagnoses, however, further evidence utilising large samples with clinical diagnoses and appropriate comparison groups is needed.

What are the overlapping and distinct characteristics of hoarding behaviours in hoarding disorder, ADHD and autism?

None of the included papers specifically investigated characteristics between HD, ADHD and autistic samples, therefore it was not possible to answer the above review question. Four papers discussed the extent of synergistic effects of co-occurring diagnoses on symptomology, mental health comorbidity and functioning. The following synthesis aims to summarises these findings and addresses a new question detailed below.

What is the impact of co-occurring HD and neurodivergence (ADHD, autism)?

Poorer outcomes for participants with co-occurring HD and ADHD, in several domains, were noted in the included papers. This included greater cognitive difficulties (indecisiveness (OR=1.04), impulsivity (OR=0.88)), poorer mental wellbeing (greater anxiety and depression (Cohen's d = 0.75), emotional reactivity (OR = 1.03), concerns over mistakes (d=0.58) and stress (OR =1.08)), difficulties with activities of daily living (OR = 2.03), and levels of squalor (OR =1.07) (Grassi et al., 2023; Grassi et al., 2024; Hall et al., 2013; Morein Zamir et al., 2022) ..

Several studies also noted significantly higher levels of HD and ADHD traits in groups with co-occurring conditions, compared to HD/ADHD alone with effect sizes ranging from d=0.75 to 0.9 (Morein-Zamir et al., 2022; Grassi et al., 2023).

The included studies provide limited evidence of a possible negative compounding impact of both HD and neurodivergence on mental health, cognitive, and functional outcomes. Co-occurring HD and neurodivergence was also found to increase the prevalence of traits for HD and ADHD (e.g. higher inattentiveness or hoarding behaviours). The lack of research examining the overlapping or distinct characteristics of autism and hoarding represents a further gap in the literature.

What psychological factors underlie and/or maintain both neurodivergence (ADHD, autism) and hoarding disorder?

Due to the methodological design of the studies included, it is not possible to draw conclusions on candidate precipitating or maintenance factors that may underlie both neurodivergence and hoarding. Three of the included studies did explore factors that potentially mediate or predict the co-occurrence of HD, ADHD and/or autism. The below synthesis addresses the following question:

What factors predict and/or mediate the relationship between HD and neurodivergence (ADHD, autism)?

Preliminary evidence from two studies suggests poor memory confidence, anxiety and depression may play a role in explaining the relationship between hoarding and neurodivergence.

Hallion et al. (2015) reported preliminary evidence for a model explaining that the effect of inattention and hoarding-related impairment is mediated by poor memory

confidence. The final model explained 91% of variance, however, the study sample was small (n=32) and the generalisability of these findings is limited.

In regard to predictors of co-occurring HD and autism, two studies reported elevated hoarding behaviours were significantly predicted by older age (β = 0.18), female gender (β = 0.21), lower education status (β = 0.15), anxiety (β=0.21) and depression (β=0.15) (Abouzed et al., 2024; Xu et al., 2015).

Although the papers reviewed provide preliminary evidence of predicting and mediating factors, further replication is required to draw conclusions and explain the relationship between co-occurring conditions.

Discussion

The purpose of this systematic review was to synthesise empirical evidence exploring the relationship between two neurodivergent conditions, autism and ADHD, and hoarding disorder. The review identified 19 papers describing the overlap between hoarding and/or neurodivergence with a range of quality.

The majority of included papers focused on the relationship with ADHD and hoarding; specifically, traits of inattention were consistently found to be associated with increased hoarding behaviours. Higher prevalence of hoarding behaviours was also found in samples with ADHD or high ADHD traits. However, only two studies explored this direction of relationship and results were less convincing as in one study (Morein-Zamir et al., 2022), only one participant in the ADHD sample (n=88) met diagnostic criteria for HD. This may indicate that inattentive traits can be a precipitating or perpetuating factor for hoarding behaviours in some people but hoarding behaviours precipitating or perpetuating inattention seems less likely. This has implications for screening and intervention of hoarding behaviours.

The relationship between hyperactivity and impulsivity traits of ADHD and hoarding behaviours was less consistent, with mainly non-significant findings. This suggests that the two subtypes of ADHD may be differentially related to hoarding behaviours. Moreover, these findings suggest that hoarding may be related to ADHD traits, rather than co-occurring diagnoses. That is, difficulties maintaining attention may be a common trait of both hoarding disorder and ADHD and therefore a risk factor for both. A further consideration is criterion contamination; that is, that the measures of hoarding and ADHD may overlap, thereby resulting in spurious inflation of associations found. Two out of 18 items of the Adult ADHD Self-Report Scale (ASRS; Kessler et al., 2005) may also capture hoarding traits. For instance, item two asks "How often do you have difficulty getting things in order when you have to do a task that requires organization?" and item 10 asks "how often do you misplace or have difficulty finding things at home or at work"; a person with hoarding disorder is likely to endorse this item due to a large volume of possessions and not necessarily due to attention/organisational difficulties. Similarly, several items of the Saving Inventory Revised (Frost et al., 2004) ask about a person's ability to control their urges. Individuals with ADHD may be more likely to endorse these items due to impaired impulse control and hyperactivity.

Although the majority of papers are consistent with a relationship between hoarding and inattention, it is also important to note that not all participants with HD endorsed ADHD traits, therefore, it is not a prerequisite (e.g. Worden & Tolin 2023). Future research should explore differences in presentation between individuals with inattentive and hyperactivity/impulsive subtypes of ADHD in regard to their hoarding behaviours to further understand these parallels. Additionally, future research is required to understand differences in people who develop hoarding behaviours with and without co-existing inattentive traits.

Two studies shed light on the differences between ADHD traits present in childhood, vs. those present in adulthood (Fitch & Cougle, 2013; Worden & Tolin, 2023). Worden & Tolin (2023) examined childhood traits of ADHD and found no differences between

participants with HD or OCD in childhood, yet in adulthood the HD group had significantly higher ADHD traits. Another study concluded that only hyperactivity traits, not inattention, in childhood were significantly related to HD (Fitch & Cougle, 2013). It may be that it is the chronicity rather than the presence of ADHD traits in childhood that might pre-empt the onset of hoarding behaviours. Alternatively, the onset of hoarding behaviours may exacerbate inattention difficulties in adulthood. However, retrospective data was used in both studies and may not be a true representation of traits in childhood. These studies did not explore the role of masking and compensatory strategies used by many people with ADHD as they learn to manage their cognitive differences throughout their lives. It is possible that individuals who hoard are less likely or able to compensate for challenges with inattention, hyperactivity or impulsivity. Future research should explore the trajectory of ADHD traits and the relationship to the onset of hoarding behaviours, using longitudinal measures.

The findings also indicate a possible synergistic effect of ADHD and HD traits; participants with higher traits of ADHD had higher HD symptoms and vice versa. This effect also linked to the impact, e.g. higher inattention traits was significantly associated with greater clutter, which in turn is linked to significantly more impairment in daily functioning (Grassi et al., 2023; Hall et al., 2013; Morein-Zamir et al., 2022). A similar compounding affect was also found in relation to anxiety and depression; higher levels of both ADHD and HD traits were linked to higher mental health difficulties (Morein-Zamir et al., 2022), suggesting that this could be non-specific.

Although evidence suggests a link between hoarding and autism in children (La Buissonnière-Ariza et al., 2018; Storch et al., 2016) very few studies exploring the link between autism and hoarding disorder in adults were found and included in this review. This identifies a gap in the literature and might reflect a view of autism as a childhood condition (Autistica, 2024) and hoarding as a condition impacting adults. Future research is needed to understand the relationship between autism and hoarding disorder in adulthood.

It is important to note the methodological limitations of the studies included as they limit the conclusions drawn from the findings. Only one of the included studies utilised an epidemiological methodology and provided some evidence for the prevalence of co-occurring ADHD/autism and hoarding disorder in the general population; however, this finding was significant only when considering any endorsed ADHD trait and not with full diagnostic criteria for ADHD (Fullana et al., 2013). Studies included in this review typically consisted of clinical populations or students, both types of samples yield significant challenges with generalisability of findings. This is particularly pertinent when exploring the co-occurrence of neurodivergence and hoarding as individuals with hoarding disorder and/or ADHD/autism likely experience barriers to accessing support services due to challenges related to their characteristics. For instance, individuals with ADHD might have trouble attending clinics due to forgetting appointments, becoming distracted, or difficulties managing their time (Matheson et al., 2013); autistic individuals may have challenges accessing clinics due to challenges with managing uncertainty and unpredictability, sensory needs or communication differences (Walsh et al., 2020). Therefore, representativeness of research samples using clinic populations is likely to be limited. The majority of studies, however, utilised self-report measures of traits, rather than clinical diagnoses. Thus, findings must be interpreted with caution.

The majority of included studies used self-report questionnaires as the predominant source of data and utilised cross-sectional designs. Although self-report data are valid, informant and clinician data may provide further insights into the relationship between the conditions of interest.

Finally, the systematic review restricted inclusion criteria to papers published after 2013 to correspond with the year in which the fifth edition of the Diagnostic and Statistical Manual (DSM-5;American Psychiatric Association., 2013) introduced hoarding disorder as a distinct diagnostic category. Despite this, the review includes five papers published in 2013

which may include data gathered prior to the implementation of the DSM-5. Although this likely will not impact the results of this review as the included papers specified that they measured hoarding behaviours/HD diagnoses, the way in which the authors conceptualised HD (i.e. as part of obsessive-compulsive disorder rather than a stand-alone diagnoses) may have impacted their choice in study design, analysis and conclusions.

There are several clinical implications of the findings of this review. The consistent link between inattention and hoarding behaviours suggests that individuals accessing support for either HD or ADHD should be screened for hoarding behaviours and individuals accessing HD services should be screened for ADHD. The present review also may be important when considering interventions; HD patients may require adaptations to therapeutic interventions to support challenges with attention, hyperactivity and/or impulsivity. This may include psychoeducation about the overlap of symptoms, including traits of both neurodivergence and hoarding within formulations, using techniques such as body doubling to support individuals to complete tasks, incorporating movement breaks or shorter blocks of information to maintain attention, and/or providing fidget toys.

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Evaluating the Strengths and Gaps of the Autism Teaching on the Doctorate in Clinical Psychology: a multi-informant approach

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Service Improvement Project

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Abstract

Autistic people are more likely to experience poor mental health than non-autistic people. Limited staff knowledge and training about autism have been identified as possible barriers to effective mental health support. The Doctorate in Clinical Psychology is a three-year training course. An online survey was conducted to evaluate trainee and recently graduated clinical psychologists (n=44) and staff members (n=16) knowledge about autism, and self-perceived competence and confidence when working with autistic people. Strengths and gaps of current autism-related teaching within the course were explored. Staff focus groups (n=9) were conducted to explore perceived barriers and facilitators of autism-related teaching within the curriculum. The majority of participants recognised that autism-related teaching needs improvement. Five themes were identified in online survey data: 1) Nothing about us without us, 2) Adults can be autistic too, 3) The Space Time Conundrum, 4) "Conscious Incompetence", and 5) The EDI umbrella. A further five themes were identified in focus group data: 1) It's a massive jigsaw, 2) The topic of autism is a 'minefield', 3) It's not in my job description, 4) Teaching reflecting clinical issues, and 5) Diverse experiences or part of diversity. Recommendations, limitations and reflections are discussed.

Autism spectrum disorder (henceforth, "autism") is a lifelong neurodevelopmental condition characterised by differences in social interaction and communication, and restricted and repetitive behaviours and/or sensory sensitivities (American Psychiatric Association, 2013). At least 1% of the UK population have an autism diagnosis (Brugha et al., 2011), with a further proportion of autistic people without a formal diagnosis (Lai & Baron-Cohen, 2015). Autistic people are up to 12 times more likely to experience a mental health problem than the non-autistic population, with approximately 79% of autistic people reporting a mental health difficulty across their lifetime (Lai et al., 2019). Autistic people are disproportionately represented in mental health inpatient units (Autistica, 2022b, 2022a; Tromans et al., 2018) and are up to seven times more likely to die by suicide than non-autistic people (Cassidy et al., 2022).

Autistic people face several challenges when accessing mental health services (Cleary et al., 2023; Crane et al., 2019; Duker et al., 2022). Lack of autism understanding, and insufficient training have been identified as barriers to effective interventions for autistic people (Spain et al., 2023). Cleary and colleagues (2023) proposed a framework to bridge the gap between segregated autism services and mental health services, aiming to avoid autistic people being referred back and forth between multiple settings. A key part of the proposal was "*implementing fit-for-purpose programs for health professionals"* with the hope that increased training will improve outcomes for autistic people (Cleary et al., 2023). Evidence has demonstrated a significant positive relationship between training, clinician's confidence in adapting therapy for autistic people (Cooper et al., 2018; Maddox et al., 2020), and improving autistic people's experience of accessing health care (Brede et al., 2022; Mason et al., 2021).

Improving mental health support for autistic people is a national priority, driven by government and charity policies. The UK Government National Autism Strategy (Department of Health & Social Care & Department for Education, 2021) set out goals for improved

acceptance and understanding of autism and reduced healthcare inequalities by 2026. In the National Health Service (NHS) Long Term Plan, reducing the overrepresentation of autistic people in inpatient units is stated as a key priority (NHS England, 2019). The UK's leading autism research charity, Autistica, has proposed an index for "gold standard" mental health care for neurodivergent individuals as part of their 2030 goals (Autistica, 2022b). Additionally, Health Education England have proposed mandatory training for all public-facing staff to improve understanding of autism (Health Education England, 2024).

Clinical Psychologists work in partnership with individuals who experience mental health and wellbeing difficulties (NHS Health Careers, 2022). In addition to assessment, formulation and therapeutic intervention, Clinical Psychologists play a key role as leaders within the NHS, shaping the way services are delivered and supporting teams to consider service users' problems from a psychological perspective (NHS Health Careers, 2022). The Oxford Doctorate in Clinical Psychology (henceforth referred to as DClinPsy) is one of 38 three-year training courses in the UK.

In line with government, NHS, charity and autism community priorities, and feedback from placement supervisors and trainees, the Oxford DClinPsy programme wished to examine perceptions and effectiveness of autism-related teaching within the curriculum. The DClinPsy academic team noted that autism-related teaching is currently positioned in the second year of training within "child and adolescent" and "learning disability" modules. Given that 50% of autistic adults do not have a learning disability (Emerson & Baines, n.d.), staff hoped to explore if/how teaching may be positioned to reflect this. This project aims to:

1. Explore staff and trainee knowledge of autism and perceived competence and confidence in working with autistic people.
2. Identify strengths and gaps in current autism related teaching,
3. Identify perceived facilitators and barriers to implementing autism related teaching within the curriculum,

4. Develop recommendations for development and implementation of autism related teaching on the DClinPsy curriculum.

Method

Participants

Trainee

A total of 154 trainee (2020, 2021, 2022 cohorts) or recently graduated (2018, 2019 cohorts) clinical psychologists from the Oxford DClinPsy were invited to complete an online survey. Sixty-eight responses were recorded; 24 responses were excluded due to survey incompletion, suggesting withdrawal. A final sample of 44 trainees (29% of potential sample) were included in data analysis. See Table 1.

Staff

A total of 29 Oxford DClinPsy staff members (excluding administration staff) were invited to complete an online survey. In total, 21 responses were recorded; 5 responses were excluded due to survey incompletion, suggesting withdrawal. A final sample of 16 staff members (55% of potential sample) were included in data analysis. See Table 1.

Nine staff members (3 directors, 6 non-director level) attended focus groups across three meetings (n=3 per group). Demographic information is not included to maintain anonymity.

Procedure

Ethical approval was gained from the Oxford DClinPsy Internal Research Committee. This was deemed sufficient as the study does not meet the remit for research as defined by the NHS Health Research Authority.

Survey invites and prompts were sent to trainee cohorts and course staff between July - December 2023. All course staff were sent an invite to the focus group phase of the study. Three hybrid focus groups took place between January-February 2024 with directors and non-directors attending separately.

Survey Development

An initial draft of the online survey was developed by the research team. The survey included open text, Likert scale and multiple-choice questions. Survey sections included participant demographics, personal and professional experience of autism, and reflections about the curriculum. Participants were asked to rate their knowledge of autism and perceived competence and confidence working with autistic people on a visual analogue scale, with 0 indicating the lowest score and 10 the highest. Participants were asked to rate the depth of content, breadth of content, structure within the timetable, and format of teaching on the following scale: "needs significant improvement", "needs slight improvement", "meets training needs", "exceeds training needs", and, "outstanding".

The first draft was sent to two autistic trainee Clinical Psychologists and a Consultant Clinical Psychologist working in NHS Child and Adolescent Mental Health Services (CAMHS). Minor amendments were made based on feedback (See Appendix B and C for surveys).

Measure of Existing Autism Knowledge

The final section of the survey aimed to measure existing autism knowledge. The Autism Spectrum Knowledge Scale Professional Version – Revised (ASKSP – R; McClain et al. (2020)) is a 25-item multiple choice measure of professional's knowledge of autism. In the original study, a sample of 427 professionals (including 210 psychologists) completed the ASKSP-R. The measure was found to have acceptable psychometric properties (McClain et al., 2020).

The purpose of including the ASKSP-R was to provide a descriptive measure of existing knowledge, and not to use in statistical analyses. To minimise the length of the survey and burden on participants, nine items deemed most relevant were chosen by the researchers (See Appendix D). Each question had one correct answer. Higher scores indicate greater correct answers.

To ensure that participants did not look up answers, or answer at random, a minimum of one minute and a maximum of nine minutes was given to complete the questionnaire.

Focus Group

Topic Guide

The focus group topic guide was developed by the researchers based on preliminary themes identified within the staff and trainee survey data, alongside the research questions. A copy of the topic guide can be found in Appendix E.

Data Analysis

Descriptive statistics were derived from demographic and quantitative survey data. Qualitative staff and trainee survey data was transferred to two separate documents. The lead researcher coded all data and developed preliminary codes and themes following Thematic Analysis protocol (Braun & Clarke, 2021); these were shared with the internal supervisor. Although inter-researcher consistency is not considered essential in thematic analysis (Braun & Clarke, 2021), analysis was discussed between researchers to reflect on researcher bias in the development of themes. Subsequently, themes were refined in an iterative and reflexive process.

Focus groups were transcribed by the lead researcher into separate documents. The process outlined above took place. To maintain anonymity, participant identifiers have not been included or related to quotes used within the result section.

Researcher Positioning

The lead researcher is a white British female trainee clinical psychologist in her thirties, in the 2022 cohort of the Oxford DClinPsy. Prior to joining the training course, she completed a PhD exploring barriers to diagnosis and support for autistic women and girls. She has seven years' experience working with autistic people in clinical, academic and research settings. The internal research supervisor is a white British woman in her thirties who is a clinical tutor on the Oxford DClinPsy. As a qualified clinical psychologist, she has worked across several NHS CAMHS teams, and routinely works clinically with autistic young people and their carers. The external research supervisor is a White British nurse and CBT therapist with 25 years experience working with autistic adults.

Results

Table 1
Participant Demographics

Demographics		Trainees (n=44)	Staff (n=16)
Age mean (SD)		28.34 (2.13)	44.4 (8.74)
Gender n (%)†	Male	4 (9.1%)	5 (31.2%)
	Female	39 (88.6%)	11 (68.8%)
	Prefer not to say	1 (2.3%)	0
Cohort Year ‡	2018	3 (6.8%)	-
	2019	4 (9.1%)	-
	2020	6 (13.6%)	-
	2021	11 (25%)	-
	2022	20 (45.5%)	-
Staff Role	Clinical Tutor	-	9 (56.3%)
	Research Tutor	-	3 (18.8%)
	Academic Tutor	-	1 (6.3%)
	Director	-	3 (18.8%)
Currently Teaching on the DClinPsy		-	14 (87.5%)
Autism diagnoses n (%)	Formal autism diagnosis	2 (4.5%)	0
	Self-identify as autistic	2 (4.5%)	0
	Not autistic	40 (90.9%)	16 (100%)
Other neurodivergence n (%)§	Formal diagnosis	4 (9.1%)	1 (6.3%)
	Self-identify	6 (13.6%)	0
	No other neurodivergence	34 (77.3%)	15 (93.7%)
Familiarity with autism n (%)	Known autistic person in personal life¶	38 (86.4%)	13 (81%)
	Worked with autistic people prior to training	35 (79.5%)	15 (9.8%)
Number of autistic people worked with (range)		1– 200	8 – 150
Settings worked with autistic people	Charity sector	15 (34.1%)	3 (18.8%)
	Clinical health setting	0	3 (18.8%)

	Community mental health	13 (29.5%)	12 (75%)
	Education settings	5 (11.4%)	1 (6.3%)
	Inpatient mental health teams	6 (13.6%)	5 (31.3%)
	Research	7 (15.9%)	4 (25%)
	Specialist outpatient mental health team	7 (15.9%)	7 (43.8%)
	Specialist neurodevelopmental teams	5 (11.4%)	5 (31.3%)
	Talking Therapies	8 (18.2%)	4 (25%)
Prior Autism Training	Reported by n (%)	19 (43.2%)	14 (87.5%)
	Part of a prior qualification	4 (9.1%)	0
	Conferences, talks, workshops, webinars	9 (20.5%)	3 (18.8%)
	Autism assessment training	3 (6.8%)	3 (18.8%)
	Continued professional development within a job role	8 (18.2%)	3 (18.8%)
	Part of clinical training (staff only) ~	-	4 (25%)
	NHS Mandatory Training ~	1(2.3%)	2 (12.5%)

notes:
*people who identified as trans men/women were included in the relevant gender category (i.e. trans men included in male).

‡ the lead researcher is in the 2022 cohort. Each cohort varies in total size (from 17, 25, 32, 36, and 44 trainees, respectively from 2018-2022).

§ not all participants provided the label they use for their neurodivergence, those who did reported ADHD, dyslexia, and dyspraxia.

¶ including family members, friends, romantic partners, and/or colleagues.

~ questions about prior autism training were open text boxes and therefore, it is possible that other participants completed these trainings but did not recall the information to include in the survey.

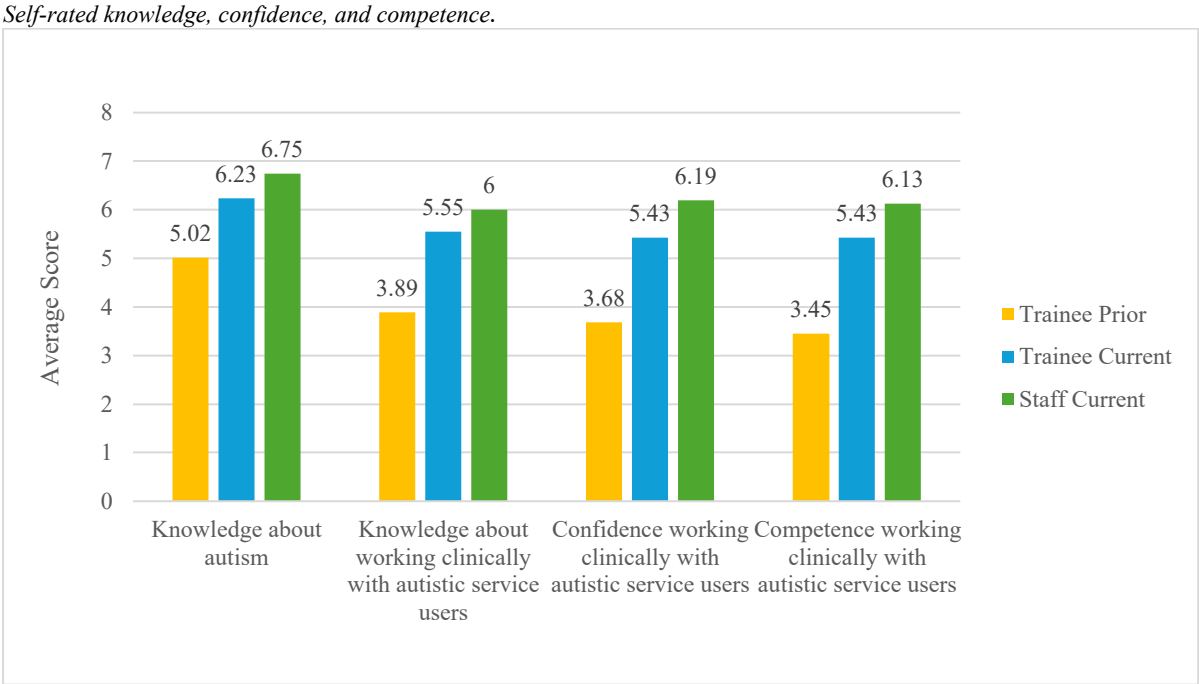
Age range and ethnicity have been redacted to maintain participant anonymity.

Self-rated knowledge, competence, and confidence

On average, trainees rated themselves as more knowledgeable, competent, and confident currently compared to before training. Staff ratings were higher on average than trainees' current ratings. Overall, 66% (n=29) of trainees' felt their knowledge, competence

and/or confidence had increased since starting training, 23% (n=10) noted no change in any score, and 11% (n=5) noted a decrease in at least one of the scores. See Figure 1, further details can be found in Appendix F.

Figure 1
Self-rated knowledge, confidence, and competence.



Evaluation of current autism-related teaching

Staff and trainee ratings can be found in Figures 2 and 3. Further details can be found in Appendix F.

Figure 2
Trainee ratings of autism-related teaching.

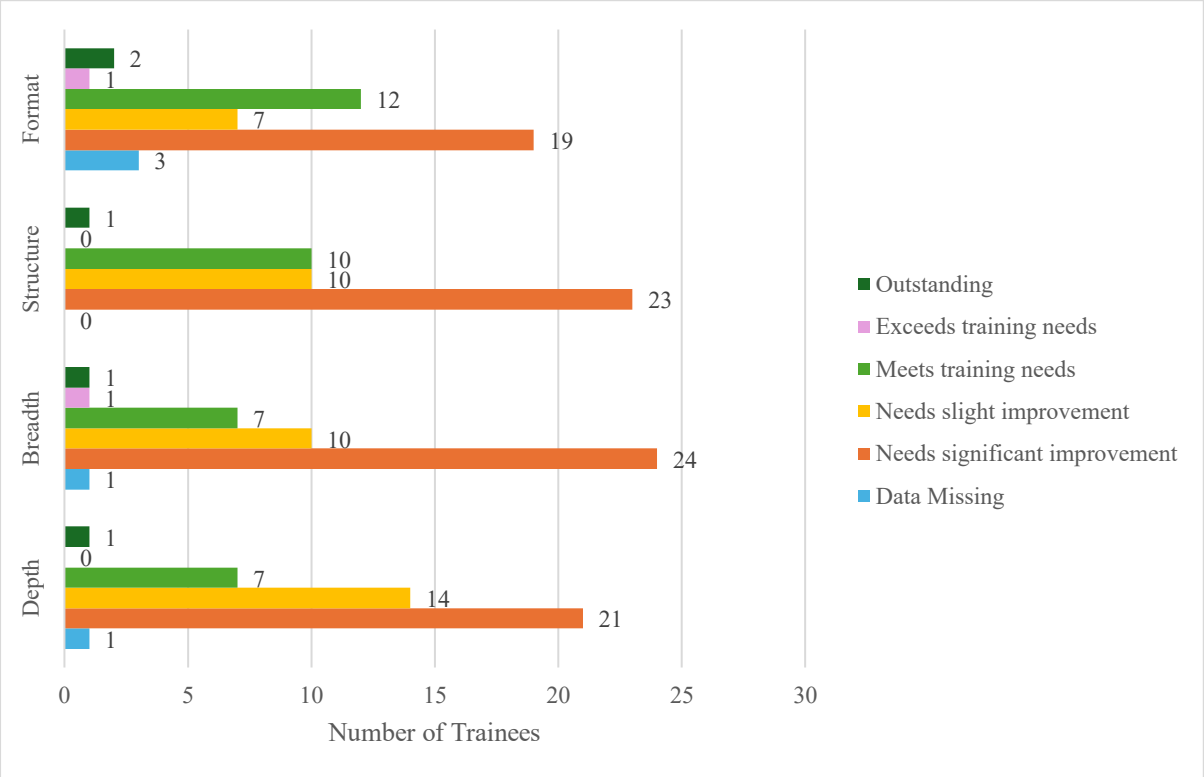
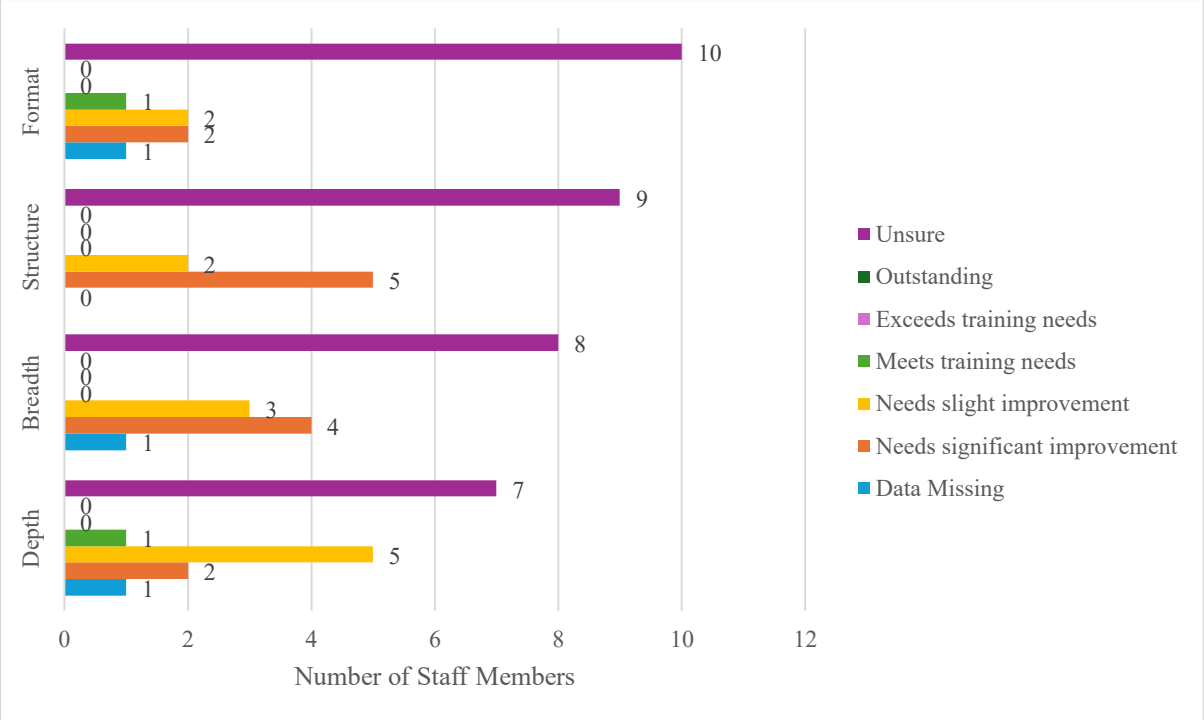


Figure 3
Staff ratings of autism-related teaching.



Existing Autism Knowledge

Seven trainee responses were excluded as completion time was less than one minute (n=6) or more than 9 minutes (n=1). Of those remaining (n=38), mean score was 5.5 (SD= 1.45, range 3-8, maximum score = 9).

Six staff members were excluded as completion was less than one minute (n=3) or more than 9 minutes (n=3). Of those remaining (n=10), mean score was 5.1 (SD= 1.44, range 3-7, maximum score = 9). See Appendix F for further detail.

Survey Data

A total of five themes were identified in the trainee and staff survey responses, 1) Nothing about us without us, 2) Adults can be autistic too, 3) The Space Time Conundrum, 4) "Conscious Incompetence", and 5) The EDI umbrella. Subthemes and theme descriptions are outlined in Appendix G.

Theme 1: Nothing About Us Without Us

This theme encapsulates the perceived high value of including the voices of people with lived experience. Trainees commented that including experts by experience "*brings teaching to life*" and aids learning processes. Trainees placed value in hearing first-hand accounts of what it is like to be autistic, facilitating understanding of the concept of autism above and beyond theoretical perspectives. Staff also acknowledged that autistic representation in the "Patient Experience Group" (PEG) could be enhanced and included in teaching.

It was noted that there is likely lived experience within trainee cohort(s) which could and should be utilised, e.g. involving trainees in the design and delivery of teaching. Participants (staff and trainees) noted that trainee lived experience should be held in mind in teaching, for instance, considering potentially "*othering*" language use. Role plays should be fully considered, as they risk being offensive and/or perpetuate negative stereotypes of autism if implemented by trainees with limited understanding. Staff also reflected on the accessibility of the course for autistic trainees, considering long teaching days and teaching styles. It was reflected that reasonable adjustments are often beneficial to all, not just autistic individuals.

Importantly, participants expressed concern privileging perspectives from experts by experience without learning disabilities, or who have the ability and confidence to co-deliver teaching. It was emphasised that it is impossible to represent the entire autistic community but that does not mean there should be no representation.

Theme 2: Adults Can Be Autistic Too

This theme covers the perceived gaps and implications of the limited teaching in first year of training. Responses highlighted the importance of considering autism across the lifespan. Several trainees commented that the existing teaching in second year focusing on child and

adolescence and people with learning disability was of a high standard, whilst acknowledging that their understanding of autism outside of these contexts was limited. The majority of trainees expressed concerns about the absence of autism teaching within the first year of training.

Trainees pointed out that the lack of autism teaching in first year contributed to feeling underprepared to work with autistic service users, particularly in working age and older adult placements. Some trainees felt that, although learning took place on placement, specific teaching within lectures would increase confidence and competence.

Several participants reflected a potentially circular relationship between limited autism teaching on clinical training and barriers to accessing effective psychological support for autistic people. Trainees expressed concerns that the current teaching may contribute to autistic individuals "*falling through the gaps*" for psychological support, as trainees felt un-equipped to recognise nuanced presentations of autism. Trainees felt that current teaching was not aligned with clinical prevalence of autism across adult and non-learning disability placements (and services).

Trainees noted clinical psychologists are thought to be "*leaders in the NHS*" and reflected on potential consequences of limited autism understanding in the context of shaping services.

Participants emphasised the need to avoid a "*one size fits all*" approach to teaching; teaching should go beyond stereotypical presentations of autism. Similarly, a neuroaffirmative approach to teaching was encouraged to avoid deficit-based narratives. Trainees expressed appreciation that autism teaching in 2nd year had a strengths-based approach.

Theme 3: The Space Time Conundrum

This theme highlights the practical challenges faced fitting autism into the Doctorate in Clinical Psychology curriculum. Participants acknowledged the breadth and depth of autism as a topic and reflected on the challenge of balancing learning from lectures and from within placements. Some trainees felt that staff overestimated the time available to learn on placement whilst managing other demands. Other trainees, especially on neurodevelopmental specific placements, felt their placements facilitated learning. For more general placements, trainees expressed less opportunity to learn autism-related skills and understanding, despite working with autistic service users.

Participants recognised competing requests for more study time in addition to more teaching content. Participants proposed a "*bare minimum*" across teaching, for example, signposting to relevant resources. There was no clear suggestion from participants of where time for additional content would come from, however, trainees commented on reducing repetition in the curriculum.

Participants commented on the nuanced and evolving understanding of autism, and the challenges this brings in teaching. The increasing research and changing clinical picture were felt to add to the complexity of deciding what is taught. There were concerns that a less in-depth, more general approach to teaching "*dampens the benefits and applicability*". Many staff members felt unable to comment on the curriculum due to not having oversight of the entirety of it; despite this, several noted an awareness of gaps in their own teaching sessions. Trainees expressed an appreciation of staff burden. Participants also noted that teaching is likely influenced by staff interests and expertise.

Many trainees reflected on the felt sense of resistance to change from course staff, describing course structures and expectations as "*rigid*". Some trainees felt pressure to educate their peers to make up for gaps in the curriculum, which increased their vulnerability (i.e. potential pressure for personal disclosure) and decreased their capacity. Trainees also considered unconscious prejudices against autism influencing the representation in teaching.

A message that enhancing autism teaching was "w*orth the challenge*" was found throughout the trainee data.

Theme 4: "Conscious Incompetence"

This theme summarises trainees experience of knowing *why* autistic people need support, but not knowing *how* to implement support, including suggestions of how to address this within the curriculum. A narrative that trainees feel under-equipped to work with autistic service users was found throughout the trainee data. Trainees noted an increasing awareness of what they do not know as they progress through training. A large proportion of responses stated the need for practical examples of what adaptions may look like and how to implement them. Trainees expressed a desire for more in-depth knowledge that goes beyond awareness and communication adaptations, for example, space to explore whether existing theoretical models are applicable for describing autistic service users' experiences.

Trainees felt uncertain about their role in the recognition of autism and how to support a service user in making decisions about seeking diagnosis. There was a sense of anxiety around how to broach conversations about autism to service users, relatives, carers, and colleagues. Personal experience of autism was reported to have drawn attention to limited autism teaching, but also increased engagement with existing teaching. Personal experiences also added to frustration around occasional instances of dated language use.

Theme 5: The EDI Umbrella

This theme describes staff comments about incorporating autism across the curriculum under the Equality, Diversity, and Inclusion component of teaching. There were mixed narratives about whether autism should be considered and/or approached differently to other aspects of diversity. Many emphasised equality, diversity, and inclusion (EDI) should be considered across all teaching. Many staff expressed a preference to embed autism more

explicitly within existing EDI teaching as opposed to segregated teaching sessions. It was noted that autism teaching needs to be meaningful, not tokenistic. Trainees spoke of all teaching being implemented "*through an autism lens*" and integrated throughout the existing teaching streams. Several participants felt it pertinent to explicitly focus on autism within topics where autistic people are over-represented. Staff reflected on the need to increase the representation of neurodiversity more generally, beyond autism.

Several staff mentioned the importance of adopting a person-centred approach rather than autism-focused approach. It was reiterated that all aspects of diversity should be included within a psychological formulation and should be emphasised as a core competency for trainees.

Focus Group Data

Five themes were identified in the focus group data; "It's a massive jigsaw", "The topic of autism is a 'minefield'", "It's not in my job description", "Teaching reflecting clinical issues" and "Diverse experiences or part of diversity?" (See Appendix H)

Theme 1: "It's a Massive Jigsaw"

This theme highlights perceived challenges of organising a curriculum. Staff emphasised and empathised with the "*behind the scenes efforts"* of managing often conflicting requests from several stakeholders including staff, trainees, external presenters, and wider influences. Staff spoke of the challenge of the "*never ending conveyor belt"* of requests, without indication of where space can be made, causing frustration for some staff. Staff were open to changing the curriculum and spoke of opportunities to review the content. However, a dominant narrative was that the "*reality of a full curriculum"* is it is impossible to cover everything.

An additional piece of the puzzle was managing the expectations of, and retaining, external presenters. Although external presenters are currently asked to include aspects of EDI in their teaching, staff were wary of adding *"directives"* such as consideration of autism within all teaching sessions, as this might "*set them [external presenters] up to fail".* It was also deemed a challenge to account for consistency and/or overlap between external presenters.

Balancing trainee needs with the requirements of becoming a clinical psychologist, in addition to the range of pre-training experience and maintaining a work-life balance was deemed difficult.

Staff suggested that perceived priority and relevance of topics may be "*lost in the marketing"*, i.e., how it is presented to trainees. Lack of teaching in working age and older adult streams was thought to be perceived as "*ignoring the vast majority of the autistic population".* Staff suggested autism should be included in existing topics (such as "*social GRACES"* (see Burnham, 2018); however, the extent to which trainees weave learnings throughout lectures as opposed to viewing learning in isolation was considered. Staff commented that time to reflect and make links across lectures is limited.

Meaningful integration of autism teaching was considered essential. A stand-alone session relating to autism theory, presentations, and adaptation was supported to allow trainees to "*carry knowledge as a thread throughout teaching"*. Some staff proposed that clinical relevance should be considered and in specific sessions, for example, lectures about eating disorders, autism should be a required topic. There were concerns that conversations about adaptations detract from "*core content"* given session time constraints.

Theme 2: The Topic of Autism is a "Minefield"

This theme describes the perceived challenges specific to increasing the inclusion of autism as a topic in the curriculum. Throughout focus groups, there was a narrative that

navigating the topic of autism was challenging. The notion of "*getting it wrong*" was thought to close conversations about autism, as presenters do not wish to cause offence. Staff proposed a culture of "*assuming best intentions*" to open space for autism-related discussion that allows individuals to make mistakes and be open to correction.

Autism was perceived as a vast overarching topic with aspects that are "*impossible to cover*". This led to conversations towards pragmatics of how to include it as a topic. Many staff members considered heterogeneity, intersectionality, and language use within the topic of autism. Several staff members noted a strength-based narrative should be a priority to avoid deficit-based generalisations.

Staff suggested many "*layers of understanding"* in relation to autism, commenting it is important to "*present a range of views"* in relation to the heterogeneity and subjective perspectives on what was deemed "*acceptable*" or not.

The above points, in addition to autism perceived as a "*rapidly evolving area"* with "*changing views"* contributed to pressure to stay up to date, adding to a sense of overwhelm and potentially causing some to avoid the topic all together within broader teaching sessions. Staff reflected that although there is a boom in autism research, little is translated into clinical practice, in their experience.

Theme 3: "It's not in my job description"

This theme depicts staff attitudes towards the role and responsibility of developing the curriculum. Some staff noted that they did not have an overview of the curriculum and felt unable to comment on certain aspects. Several staff members expressed surprise at the placement of autism related teaching. Teaching streams were described as separate entities with staff feeling there was limited awareness of the "*bigger picture*", subsequently impacting the way teaching is delivered.

Staff queried their role in considering the entirety of the curriculum, as well as how effectively they can consider specific topics such as autism if not directly related to their clinical work. Adding to this was a sense of burden and staff high workloads, resulting in limited capacity to consider these issues. Personal perspectives, interests and staff lived experiences were suggested to influence priorities.

Staff reflected on political influence within the course and from governing bodies. Reflections were made regarding changes in focus and ethos with shifting course leadership, cohort size, and directives such as the NHS Long Term Plan and university regulations. Some staff members felt, whilst discussions are had amongst staff members, ultimately a final decision is made "*at the top".* Funding, political agendas and governance from accrediting bodies were also deemed important drivers for change.

Emphasis was placed on working together to create shared responsibility between staff and trainees to "*bring up autism*". Drawing on skills from supervisors, course staff, trainees and third sector organisations who have personal or professional experiences of autism was suggested. Creating dedicated spaces within meetings for discussion about autism or relevant subjects was proposed to empower and open communication across stakeholders. Shifting narratives towards what can be implemented on the course, rather than what cannot, was suggested to be a useful starting point.

Theme 4: Teaching Reflecting Clinical Issues

This theme highlights the relationship between what is included within the curriculum and psychologists' role in clinical settings. Participants reflected on clinical issues observed in their work, including long waiting lists, limited effectiveness of treatments, and barriers to services. Participants noted autism is increasingly prevalent across all services, but teaching may not reflect that.

Staff members commented on the responsibility as clinicians to update knowledge in line with clinical issues. Some staff noted their own confidence in working with autistic people was impacted by limited training in this area. It was noted that limited teaching may contribute towards clinical issues e.g., negative diagnostic journeys, misdiagnosis, poor therapeutic experiences, impact on identity and prejudice against autistic people; staff reflected on the role of clinical psychologists and the opportunity there is to improve these areas. Staff picked up on assumptions or stereotypes made about autism and how teaching can help address these.

Staff noted the relevance of transferable clinical competencies, e.g., person-centred formulations, to account for heterogeneity within autism. Clinical skills such as how to work with someone who has autistic traits, but no diagnosis, and how to support diagnostic journeys were considered missing from the curriculum.

Theme 5: Diverse experience or part of diversity?

This theme considers autism in relation to other aspects of diversity and their inclusion within the curriculum and broader teaching spaces. Parallels were drawn between autism and other aspects of diversity and their inclusion in the curriculum. Staff considered the complexities of prioritising certain protected characteristics over others, and whether there are specific considerations relevant to autism. Unique aspects of autism were identified, however, several felt autism should be "*nested within health inequalities*" teaching.

Staff noted including lived experience in teaching improves engagement and retainment of information. However, some staff worried about a voyeuristic nature of including experts by experience, if not done collaboratively. Limited funding was noted as a key barrier for collaboration with experts by experience.

Staff members reflected that adaptations often have universal benefits. Similarities were drawn from the limited reasonable adjustments for autistic trainees within course

structures (e.g. limited flexibility with long teachings days, rooms being adapted for sensory sensitivities) and service user experiences in mental health services. It was noted that limited understanding about reasonable adjustments may underpin these experiences. Staff suggested creating safe spaces where trainees/staff share their experiences, enabling others to learn from them, in turn reducing the possibility of "othering" trainees and staff during autism related teaching.

Discussion

This project aimed to identify the strengths and gaps in the Oxford DClinPsy curriculum, exploring whether autism focused teaching was in line with key stakeholder priorities. Rich data from surveys and focus groups revealed key themes. The strengths of the existing teaching were noted, with appreciation of strength-based narratives. Enhanced meaningful training, co-developed with autistic people, was deemed necessary to reduce negative stereotypes and clinical implications of poor autism knowledge. However, a sense of overwhelm of competing demands may be limiting action and changes to the curriculum. Limited autism-related training is not unique to clinical psychology; studies examining knowledge, perceived confidence and competence of psychotherapists (Gallant et al., 2023), and GPs (Unigwe et al., 2017), have highlighted benefits of enhanced training. Studies implementing the "Extension for Community Healthcare Outcomes" (ECHO) model of training sessions, have demonstrated increased self-efficacy and knowledge, changes in practice, and high satisfaction with training programmes (Dreiling et al., 2022; Malow et al., 2023; Mazurek et al., 2017, 2020; Nowell et al., 2020). It is likely that enhanced autism training on the DClinPsy will yield similar benefits.

Data driven recommendations can be found below (See Table 2). The findings and recommendations were fed back to the academic staff team; details of which can be found in Appendix I.

Table 2.

Data driven recommendations and action points.

	Recommendation	Suggested Action Plans
1.	Include a session about broader neurodivergence and reasonable adjustments within year 1 induction.	1. Prioritise a neuroaffirmative approach to teaching, 2. Co-design the session with neurodivergent person(s)
2.	Deliver a teaching session about autistic adults without a learning disability in first year of training, considering the following subjects: - Autism theory - Assessment and recognition skills and tools - A psychologist role in the diagnostic journey - Difference in autism presentations - Explanations for vulnerability to mental health difficulties for autistic people	1. Identify and collaborate with autistic adult(s) to co-develop teaching session, 2. Identify and recruit expert by profession to co-develop teaching session, 3. Identify appropriate timeslot within the existing curriculum to implement training, possibly consulting with trainees regarding what they consider to be repetitive in other teaching content. 4. Ensure practical examples are provided within the teaching session,

	- Adaptations to psychological models and interventions - How to approach conversations about autism - How to work with people without a formal diagnosis - Language use and preferences - Intersectionality - Real-life experiences from autistic people - Sensory sensitivities	5. Model appropriate role plays to avoid perpetuating negative, harmful, or inaccurate stereotypes of autism, 6. Explicitly encourage trainees to transfer learning across teaching sessions (applicable to many topics, not just autism).
3.	Encourage external and internal presenters to consider neurodivergence within teaching sessions.	1. When inviting external presenters to teach, provide guidance that states the course advocates for the needs of neurodivergent service users and encourages all presenters to reflect on and/or present relevant considerations or adaptations. 2. Hold quarterly meetings with external presenters as an opportunity for shared learning, to reduce repetition, improve consistency across lectures and for external

		presenters to ask questions to enhance their own confidence and knowledge. 3. Include a standing agenda item for autism/neurodiversity in the above meeting. 4. Utilise local knowledge (i.e. trainees, course staff, external presenters, other local organisations) to enable staff to remain up to date with literature/ current understandings of autism. 5. Include neurodiversity as a standing agenda item on existing internal curriculum meetings. 6. EDI leads to consider how to explicitly incorporate neurodivergence and autism into existing teaching.
4.	Target most relevant teaching sessions to include slides specific to adaptations/considerations for autistic people	1. Consult with experts by profession and/or experience about teaching sessions/areas in which autism would be most relevant.

		2. Hold a working group to negotiate an approach and guidelines for presenters of the identified topics. 3. Create guidelines for identified presenters about how to meaningfully include autism within teaching content. 4. Consult with autistic people about the appropriateness of included content.
5.	Improve course staff oversight of curriculum related issues (i.e. EDI, neurodivergence)	1. Hold twice yearly meetings with all course staff to consider curriculum related issues and provide space for reflection. 2. Allocate a staff member as neurodiversity lead. This role will be responsible for having oversight of autism-related teaching on the course and for developing relationship and consulting with autistic experts by experience. 3. Neurodiversity lead to feedback to colleagues in meeting suggested in item 3.2.

Limitations

Focusing on one type of neurodivergence (e.g. autism) is limiting as there is a notable overlap in neurodivergent conditions (Lai et al., 2019). It is possible that having a specific focus unintentionally maintains a view of neurodivergence in isolation, as opposed to a person-centred approach to understanding mental health needs.

Responses across year groups were combined; it is likely, and expected, that trainees in earlier year groups would rate themselves less knowledgeable, confident, and competent than later cohorts and course staff. It is also likely that responses were influenced by trainee's progress on the course; participants in their first year of training would not have received autism-related teaching in year two, and thus opportunities to reflect on positive aspects of autism-teaching on the course were limited. It should be noted that staff are assigned to clinical, research or academic teams which likely influenced knowledge/engagement with the curriculum.

The data presented here are specific to the Oxford DClinPsy. Future research is needed to compare these results to other DClinPsy courses in the UK.

Conclusion

Evidence highlights the link between clinician knowledge and access to appropriate support for autistic people. This study evaluated the autism-related teaching on the Oxford Doctorate in Clinical Psychology. Existing autism teaching was viewed positively. Enhanced teaching in first year of training and targeting topics where autistic people are overrepresented were recommended. Barriers included balancing competing training needs and staff sense of overwhelm. Co-developed and delivered teaching was considered essential to facilitate learning. Recommendations aim to improve clinical knowledge, confidence, and competence, which in turn is expected to improve experience and outcomes for autistic people accessing mental health services.

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Staff recognition of autism and autistic traits in homelessness services: a vignette study

Doctorate in Clinical Psychology

Theory Driven Research Project

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Proposed Journal: This report has been formatted in preparation for submission to "British Journal of Clinical Psychology". This journal was selected as clinical psychologists working in a range of settings, including homelessness services, might be more likely to access this journal than an autism specific one.

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Abstract

Evidence suggests that autistic people are overrepresented in homelessness populations and may experience barriers to support. This study aimed to explore the extent to which staff working in homelessness services recognise autism in service users, and whether staff consider making adaptations to support. A total of 203 staff working face-to-face with people experiencing homelessness in a homelessness service in the UK completed an online survey. Participants were asked to identify a mental health or neurodevelopmental condition within five co-produced vignettes of hypothetical service users depicting 1) traditional autism presentation, 2) nuanced autism presentation, 3) psychosis, 4) emotionally unstable personality disorder (EUPD), 5) no co-occurring condition. Participants were most accurate at identifying traditional presentations of autism and least accurate at identifying EUPD. Personal and professional connection and experience did not predict accuracy, nor whether participants would make adaptations to support. The results suggest that improvements to the recognition of nuanced autism is needed. Future research is needed to explore the implementation of adaptations, and service users' experience of adaptations.

"Homelessness" is defined as the lack of fixed night-time accommodation (Fazel et al., 2014). The term homelessness covers a range of experiences, from rough sleeping to "hidden homelessness" e.g., sofa surfing (Fazel et al., 2014). The 2023 "annual snapshot" identified 3,898 people rough sleeping across England, and 109,000 households living in temporary accommodation between July and September 2023 (Crisis UK, 2024; Department for Levelling Up, Housing & Communities, 2024). Figures from January-March 2024 indicate a sharp increase of 19.8% in people and families experiencing homelessness compared to figures from the same period the previous year (Ministry of Housing, Communities and Local Government, 2024), with socio-political factors such as lack of affordable living and increased living costs likely playing a role. People experiencing homelessness face increased risk of harm from others, poor mental health and reduced life expectancy (Crisis, 2023).

Autism is a neurodevelopmental condition characterised by differences in social communication and interaction, in addition to restricted and repetitive behaviours and/or interests (American Psychiatric Association, 2022). Emerging evidence suggests autistic people are at elevated risk for homelessness. Churchard et al. (2019) interviewed keyworkers of 106 people experiencing homelessness in London with the aim of assessing autistic traits. Overall, 12.3% of the sample had a level of autistic traits consistent with diagnostic criteria. In a similar study conducted in Ireland, 3% of a homeless sample demonstrated a level of autistic traits indicative of meeting diagnostic criteria, with an additional 9% of participants indicating a level of autistic traits that "possibly" indicate autism (Boilson et al., 2022). In contrast, autism prevalence in the general population is between 1-2% (Brugha et al., 2011; Zeidan et al., 2022).

There is limited research as to why autistic people are likely overrepresented in homeless populations. The core features of autism may offer some explanation. For instance, social communication and interaction differences may lead to increased relationship

breakdown and limited social support leading to becoming homeless. These differences may increase difficulties living in shared spaces, adding barriers to getting out of the cycle of homelessness due to the unsuitability of temporary accommodation and limited options for permanent solo living spaces. Preference for sameness may add further challenges when managing change and uncertainty involved in finding a living place. Sensory sensitivities, common for many autistic people, may make available homes unsuitable (Kargas et al., 2019; Osborn & Young, 2022). Factors beyond the individual likely contribute to the risk of becoming homeless, such as limited understanding and empathy from others, and reduced access to social and welfare services due to barriers imposed by neurotypical norms (Lockwood-Estrin & Churchard, 2024).

In addition to increased risk of becoming homeless, autistic people may also face additional barriers when accessing and navigating housing services; for instance, social difficulties when negotiating with services, challenges in executive function, and difficulties managing uncertainty and change (Stone, 2022; Stone et al., 2022). Some autistic people, therefore, likely need specialist support (Garratt & Flaherty, 2023).

Early appropriate support is a key factor for improving outcomes for autistic people (Mozolic-Staunton et al., 2020; Shaw et al., 2020). A diagnostic label is often the main avenue to support, yet the evidence suggests that many people experiencing homelessness have autistic traits above diagnostic threshold but no formal diagnosis. Therefore, recognition of autistic traits by staff working in homelessness services is essential to ensure timely and appropriate support is offered to all.

Autism is often considered a “hidden disability” due to 1) the large heterogeneity in presentations and experiences, 2) some autistic traits being “internal” or “relational”, and 3) some autistic people’s ability to mask their autistic traits (Cook et al., 2021; Hickey, 2023; Shannon, 2019). Evidence has shown that individuals presenting with a nuanced presentation

of autism experience delayed, missed, or mis- diagnoses and support (Kentrou et al., 2024; Young et al., 2018).

People with a better understanding of "hidden disabilities" have a greater ability to recognise them (The Cabinet Office, 2020). Studies completed in community health teams and youth offending teams have shown that staff members who complete autism-specific training have greater autism awareness and are more likely to implement adaptations when working with autistic individuals (Ashworth & Tully, 2017; Clark et al., 2016). Existing literature also demonstrates that personal connections with autism (e.g. an autistic family member) significantly increases autism awareness (Dillenburger et al., 2013). It is unclear, however, whether training and/or personal connection to autism has this impact in a homelessness context, and/or if it increases the awareness of nuanced presentations of autism.

Autistic people are up to 12 times more likely to experience poor mental health than non-autistic individuals (Lai et al., 2019). Many autistic people, particularly those with nuanced presentations, have experienced misdiagnosis prior to receiving their autism diagnosis (Fusar-Poli et al., 2022; Hull et al., 2020a; Kentrou et al., 2024). Staff working in homelessness service may be more familiar with mental health presentations due to elevated prevalence within populations experiencing homelessness, with estimated prevalences of 23.1% for personality disorders and 12.7% for psychosis (Fazel et al., 2008). Therefore, recognition of autism and related needs may be overshadowed by co-occurring mental health diagnoses in homelessness services.

Taken together, the heterogenous presentations of autism, autistic people's vulnerability to poor mental health and the overrepresentation of mental health difficulties in homelessness services, in combination with limited access to specific autism training, may contribute to poor recognition of and support for autism-related needs.

Aims and Hypotheses

This study aims to explore the extent to which staff working in homelessness services identify autism in service users, and whether staff consider making adaptations to service users support.

The hypotheses are:

1. Staff working in homelessness services will identify autism in service user vignettes less accurately than other diagnoses (e.g., psychosis, personality disorder).
2. The accurate identification of autism will be predicted by prior experience and/or autism-specific training.
3. Prior experience and/or autism-specific training predicts the presence of adaptations to support for autistic service users.

Method

Participants

Staff with more than six months experience working in homelessness services (third sector, government agencies, or housing associations) in the UK, with face-to-face contact with service users were invited to participate via the researchers' networks, social media, and direct contact with services via email.

A power analysis was conducted using GPower version 3.1.9.2. A medium Cohen's *f* effect size of 0.25 was used based on the results of Tsirgiotis et al., (2022) who reported Cohen's *f* of 0.24-0.62 (converted from Log Odds Ratios). The lower end of this range was chosen to allow for medium effect sizes to be detected in this study. To achieve power of 0.80 for an effect size of 0.25, a sample size of 200 participants was required.

A total of 314 potential participants expressed interest in completing the study between January and October 2024. Of these, 261 participants commenced the main survey,

however 58 were removed due to incompletion. Therefore, a final sample of 203 participants were included in the analysis. Demographic data can be found in Table 1.

Table 1
Participant demographics

Variable		N (%)
Gender	Male (including trans man)	59 (29%)
	Female (including trans woman)	139 (68.5%)
	Non-binary/gender fluid	2 (1%)
	Prefer not to say	2 (1%)
	Missing	1 (0.5%)
Mean age		41.5 years (SD = 11.9)
Age range		20 – 69 years
Ethnicity†	Asian	2 (1%)
	Black African	3 (1.5%)
	Mixed/Multiple Ethnicities	6 (3%)
	White British	169 (83.3%)
	White Other	22 (10.7%)
	Prefer not to say	1 (0.5%)
UK Nation	England‡	185 (91%)
	Wales	4 (2%)
	Scotland	1 (0.5%)
	Northern Ireland	1 (0.5%)
	Not Specified	12 (6%)
Service Type	Third Sector/Charitable	142 (73%)
	Government/ Local Authority	51 (25%)
	NHS	6 (3%)
	Housing Associations	3 (1.5%)
	Other not specified	1 (0.5%)
Mean time working in homelessness service		7.12 years (SD= 7.23) Range = 0.5 – 30 years
Autism Diagnosis	Formal diagnosis	3 (1.5%)
	Self-identify	9 (4.4%)
	Not autistic	181 (89.2%)
	Prefer not to say	9 (4.4%)
	Missing	1 (0.5%)
Other Neurodivergent (ND) Diagnosis	No other ND diagnosis	156 (76.8%)
	Formal ND diagnosis	29 (14.3%)
	Self ND diagnosis	28 (13.8%)
	Prefer not to say	6 (3%)
Known autistic person in personal life	Close family member(s)	72 (35%)
	Extended family member(s)	37 (18.2%)
	Friend(s)	83 (40.9%)
	Romantic partner(s)	19 (9.4%)
	Colleague(s)	47 (23.2%)
	Other	12 (5.9%)

	Prefer not to say	5 (2.5%)
	I do not know any autistic people in my personal life	41 (20.2%)
Experience working with autistic service users	Yes	175 (86.2%)
	No	16 (7.9%)
	Unsure	12 (5.9%)
Average number of autistic service users worked with§		28.92 (SD=80.94) Range = 0-1000 service users
Autism Specific Training	Yes	102 (50.2%)
	No	101 (49.8%)

NB: † other ethnicities were shown to participants, however only the ethnicities selected are presented here.
‡ representation was present from all English regions; full breakdown can be found in Appendix O.
§ participants were asked to estimate the number of service users they have worked with, but it did not specify in their current role, therefore some participants have estimated across their careers.

Design

Using vignettes allows for the amalgamation of service user characteristics, whilst maintaining anonymity. This design has been utilised in studies examining the recognition of autism (e.g. Whitlock et al., 2020). A randomised design was used to present five vignettes to participants and measure the effect of vignette type on the likelihood of diagnosis.

Materials and Measures

Vignette Development:

An initial vignette framework was developed between authors (VM and GLE) to ensure consistency across the vignettes. The framework included a statement for the start of each vignette ("You are working with [name] who is in their 30s and is currently experiencing homelessness. You have received a referral from the local authority as their temporary accommodation arrangement has broken down and they are at risk of rough sleeping."), and five descriptors to include for each:

1. The problem(s) with temporary accommodation

2. The key event first leading to homelessness.
3. The first contact with homelessness services from the perspective of the service user.
4. The first contact with the homelessness service from the perspective of "your" (the reader's) colleague.
5. The perspective of the current contact from the person reading the vignette.

This framework was finalised with an autistic woman who works in a homelessness service and who has lived experience of homelessness, and the final author (AC).

Vignettes were subsequently co-developed with 1) staff working with autistic service users in homelessness services, 2) researchers working in the field of homelessness and autism, and 3) service users with a personality disorder, psychosis, or an autism diagnosis, and experience of homelessness, to enhance face validity (Evans et al., 2015; Gould, 1995). Two autism vignettes were included to capture the "nuanced" presentation of autism based on the "female phenotype" (Hull et al., 2020a, 2020b), in addition to more traditional presentations of autism. Psychosis and Emotionally Unstable Personality Disorder (EUPD) presentations were chosen in discussion with staff working in homelessness services, and due to evidence of misdiagnosis of psychosis/EUPD for autistic individuals (Belcher et al., 2022; Lai & Baron-Cohen, 2015; Van Schalkwyk et al., 2015). All experts by experience were paid £15.

To enhance content validity an iterative process was followed to ensure majority agreement on the presentation described. An online survey was created via Qualtrics including the five vignettes presented in a random order, and an open-text box after each in which participants were asked to "*Please state the diagnosis (if any) you think this service user may have. Please only enter one diagnostic label, if you do not know or are not sure please state "not sure". If you think the service user has no psychological diagnosis, then please put "none*".

The validation survey was circulated to clinical psychologists (including trainees) through the researchers' networks and social media. Data were preliminarily checked after 16 responses to the validation survey revealing only 1/16 participants accurately labelled the EUPD vignette (the other vignettes ranged from 70-100% accuracy; See Table 2). The EUPD vignette was subsequently amended in consultation with a clinical psychologist working in a personality disorder service and a trainee clinical psychologist with experience working with this population. Following these consultations, traits of impulsivity, emotional lability, relationship breakdown and risky behaviour were emphasised within the vignette and the updated EUPD vignette was added to the validation survey.

Forty psychologists completed the second phase of the validation survey. The updated survey was not sent to psychologists who had previously been invited; therefore, it is probable that these responses were new participants, however, this cannot be guaranteed as participation was anonymous. As the other vignettes remained the same, data from both validation phases (n=56) have been included for all but the EUPD vignette (n=40).

Table 2
Vignette Development Survey Participant Responses

Vignette	Label	N (%)
Traditional autism	**Autism**†	48 (85.7%)
	No diagnostic label	8 (14.3%)
Nuanced autism	**Autism**†	39 (69.6%) ‡
	None/not sure	13 (23.2%)
	"interpersonal difficulties linked to trauma"	1 (1.8%)
	"anti-social personality disorder"	1 (1.8%)
	Acquired Brain Injury	1 (1.8%)
Psychosis	**Psychosis**	32 (76.8%)
	None/not sure	9 (16.1%)
	Complex Trauma	1 (1.8%)
	Autism	3 (5.4%)
EUPD	**EUPD**	26 (65%) §
	"insecure attachment"	1 (2.5%)
	"anxiety/social anxiety"	2 (5%)
	Autism	2 (5%)
	none	4 (10%)
	"trauma"/ "CPTSD"/ "Childhood abuse"	5 (12.5%)
No Additional Diagnosis	**None**	45 (80.4%),

Low mood/ “circumstantial” depression	11 (19.6%)

Note: The intended/accurate answer is in bold for each vignette. All percentages have been rounded to the nearest one decimal point. EUPD = Emotionally Unstable Personality Disorder.

†synonyms of autism were suggested, including “ASD” and “autism spectrum condition”

‡ The authors deemed this acceptable as the concept of nuanced autistic traits (based on the notion of a female autism phenotype; (Hull et al., 2020) has emerged in recent years and likely explains lack of recognition.

§ Due to debate regarding the overlap between trauma and EUPD (Lewis & Grenyer, 2009), and research evidencing the misdiagnosis between EUPD and autism (Fusar-Poli et al., 2022), 65% was deemed an acceptable threshold.

Online survey

For the main survey, following the information sheet and consent form (see Appendix M), five vignettes were presented to participants in a randomised order via Qualtrics to reduce order effects.

An open textbox with the following instructions was presented after each vignette “*please state the diagnosis (if any) you think this service user may have. Please only enter one diagnostic label, if you do not know or are not sure please state "not sure". If you think the service user has no psychological diagnosis, then please put "none”*”.

Participants were then asked to rate the likelihood that the service user would meet diagnostic threshold for a list of mental health and neurodevelopmental conditions on a visual analogue scale (VAS) ranging from “0” – not at all likely, to “100” – extremely likely. The list of diagnoses was decided in discussion with experts by experience and included: autism, depression, generalised anxiety disorder, personality disorder, psychosis, substance misuse. These options were selected to include choices beyond those represented in the vignettes, to minimise participants learning or assuming the “correct” response. Options were presented in alphabetical order.

For each vignette, participants were asked if they would make adaptations using yes/no/unsure options. If the participant indicated “yes” or “unsure” the participant was asked “what adaptations to support would you consider for this service user” in an open text box.

Demographics. Participants were asked to state their age in years, gender and ethnicity. Participants were then asked to state the type of service they worked in from multiple choice options and their job title, number of years of experience in homelessness services, UK county in open text box.

Autism Experience. Participants were asked whether they have a formal or self-identify of autism and/or other neurodivergent diagnosis. Participants were asked if they know anyone who has an autism diagnosis in their personal life, and whether they have worked with autistic service users and to estimate how many to the nearest 10. They were asked whether they have received specific autism training and to provide details about the duration, context, content and timing of the training.

Psychosis & EUPD Experience. The same questions outlined in the section above were adapted to ask participants about psychosis and EUPD.

A full copy of the survey can be found in Appendix M.

Procedure

Ethical approval was received from University of Oxford Central University Research Ethics Committee (CUREC), ethics number: R90351/RE001. Participants were invited to take part via email, social media, and posters. To reduce the likelihood of artificial or "bot" data, participants were initially directed to an "expression of interest" survey in which they were asked to include their job role, their place of work and a workplace email address (See Appendix L). If the researchers were unsure about the authenticity of the contact details, the potential participant was contacted to confirm they met inclusion criteria. A link for the online survey was then sent directly to the participant via email.

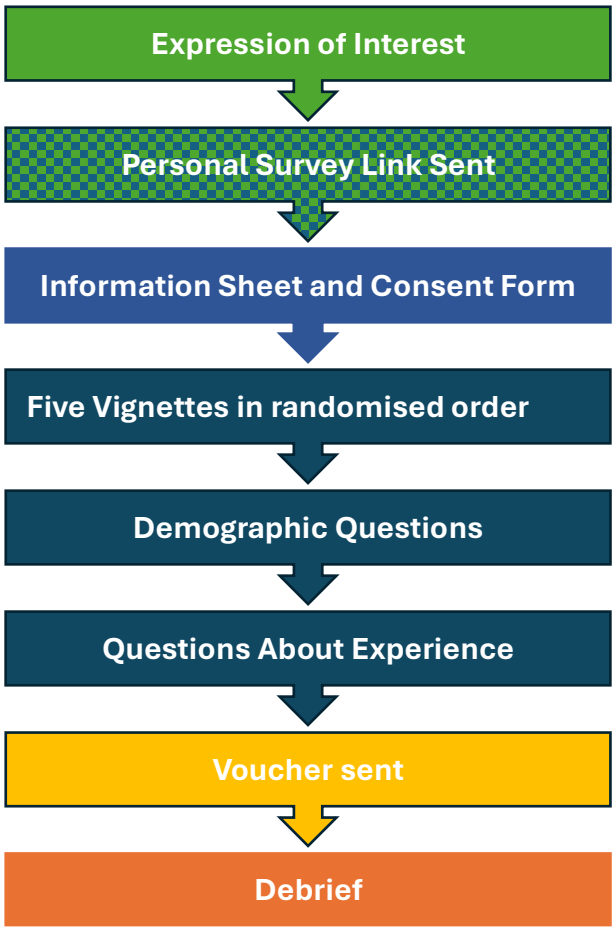
Once participants accessed the main survey link, they were shown an information sheet and consent form, followed by the vignette block, the demographic block, the autism experience block and the psychosis/EUPD block in order. Once data collection was closed

(October 2024), all participants were sent a debrief email (see Appendix N). An overview can be found in Figure 1.

Ethical Considerations

Participants were not informed that autism is the focus of the study at the start. This was essential as, if participants were aware that the aim of the study was to assess their ability to identify autism, they would likely be vigilant to perceived traits and answers may be biased. Participants were told the study aimed to investigate staff members' ability to identify service user needs. Participants were debriefed via email (See Appendix N). Participants were given a £10 voucher upon completion of the survey.

Figure 4 Survey Flowchart



Data Analysis

Analysis was conducted using SPSS Version 29.0.2.0.

Data were manually checked for fraudulent responses. If participants did not provide open text responses during the vignette block of questions, their answers in the demographic and experience blocks were examined to determine whether responses appeared realistic and appropriate. If participants did not accurately respond to the "attention check" question, their open text responses were examined to determine engagement with the survey. All data were deemed to be appropriate.

Discrepancy variables were created from the VAS for each of the "correct" answers for each vignette by subtracting the participant's score from 100. As the VAS were not forced responses, if a participant had left it blank but had demonstrated their understanding of the VAS in other vignettes, their discrepancy score was assumed to be 100 (indicating a VAS of 0). These scores were imputed manually for each participant. Lower discrepancy scores indicate greater accuracy.

Hypothesis one

To compare variation in accuracy (continuous DV: discrepancy score) across vignettes (categorical IV: autism, psychosis, PD), a one-way repeated measures ANOVA was conducted. Pairwise comparisons were analysed, with Bonferroni corrections for multiple comparisons.

Hypothesis two

Multiple linear regressions were conducted to determine whether prior experience/training (IVs: number of years working in homelessness services, participant's autism diagnosis, personal experience (e.g. autistic family, friend, colleague), professional

experience, the number of autistic people worked with, and autism-specific training received) predict accuracy on the autism vignettes (continuous DV: discrepancy score).

Hypothesis three

Binominal logistic regressions were completed to determine whether prior experience/training (IVs: number of years working in homelessness services, participant's autism diagnosis, personal experience (e.g. autistic family, friend, colleague), professional experience, the number of autistic people worked with, and autism-specific training received) predict whether the participant will adapt support (categorical DV: yes/no) for autistic service users depicted in the vignettes.

Results

Hypothesis One: Staff working in homelessness services will identify autism in vignettes less accurately than other diagnoses (e.g., psychosis, personality disorder).

All assumptions were met with the exception of the assumption of sphericity, Huynh-Feldt correction was applied ($\varepsilon = 0.97$).

Discrepancy scores were statistically significantly different across vignettes, $F(2.91, 587.61) = 36.24$, $p < .001$, partial $\eta^2 = .152$. Post-hoc analysis with Bonferroni corrections revealed that participants were significantly more accurate at labelling the diagnosis presented in vignette one ("traditional autism") compared to vignette two ("nuanced autism", Mean Difference = -9.41, 95% CI [-15.53, -3.30], p<.001), vignette three (psychosis, Mean Difference = -10.16, 95% CI [-16.41, -3.90], p<.001) and vignette four (EUPD, Mean Difference = -26.35, 95% CI [-33.73, 18.97], p<.001).

Participants were significantly more accurate at labelling vignette two ("nuanced autism") compared to vignette four (EUPD, Mean Difference = -16.94, 95% CI [-24.29, -9.59], p<.001), but not vignette three (psychosis, Mean Difference = -0.74, 95% CI [-7.41,

5.92], p=1.00). Participants were significantly more accurate at labelling vignette three (psychosis) compared to vignette four (EUPD, Mean Difference = -16.19, 95% CI [-23.39, -8.99], p<.001). Labels and accuracy for each vignette can be found in Table 3.

Table 3
Percent accurate and other diagnostic label(s) provided by participants separated by vignette number

		N (%)
Vignette 1	Addiction	1 (0.5%)
	ADHD	3 (1.5%)
	Autism†	**161 (79.3%)**
	Anxiety‡	18 (8.9%)
	Depression	3 (1.5%)
	Developmental Disorder	2 (1%)
	Dyslexia	1 (0.5%)
	Neurodivergent§	6 (3%)
	None	1 (0.5%)
	Not Sure	16 (7.9%)
	Personality Disorder^	1 (0.5%)
	Social and Emotional Challenges	1 (0.5%)
	Trauma±	2 (1%)
	Mean discrepancy score	**= 25.50 (SD= 26.16)**
Vignette 2	Addiction	1 (0.5%)
	ADHD	8 (3.9%)
	Anxiety‡	13 (6.4%)
	Autism†	**127 (62.6%)**
	Bipolar	2 (1%)
	Depression	2 (1%)
	Developmental Disorder	1 (0.5%)
	Dyslexia	1 (0.5%)
	Learning difficulty	1 (0.5%)
	Learning disability	1 (0.5%)
	Neurodivergent§	5 (2.5%)
	None	3 (1.5%)
	Not Sure	30 (14.8%)
	Personality Disorder^	16 (7.9%)
	Psychosis%	4 (2%)
	Trauma¶	2 (1%)
	Mean discrepancy score	**= 34.91 (SD= 30.41)**
Vignette 3	ADHD	4 (2.0%)
	Anxiety‡	3 (1.5%)
	Autism*	7 (3.4%)
	Bipolar	2 (1%)
	Depression	3 (1.5%)
	Mental Health	4 (2%)
	None	1 (0.5%)
	Not Sure	29 (14.3%)
	Personality Disorder^	21 (10.3%)
	Psychosis%	**134 (66%)**

	Substance Misuse	3 (1.5%)
	Mean discrepancy score	**= 35.66 (SD= 30.09)**
Vignette 4	Adjustment Disorder	1 (0.5%)
	Anxiety‡	28 (13.8%)
	Attachment Disorder~	13 (6.4%)
	Autism†	25 (12.3%)
	Bipolar	2 (1%)
	Depression	17 (8.4%)
	None	4 (2%)
	Not Sure	29 (14.3%)
	Personality Disorder^	**79 (38.9%)**
	Psychosis%	5 (2.5%)
	Self-Harm	1 (0.5%)
	Suicidality	1 (0.5%)
	Trauma¶	29 (14.3%)
	Mean discrepancy score	**= 51.85 (SD= 35.80)**
Vignette 5	Anxiety‡	43 (21.2%)
	Depression	79 (38.9%)
	None	**82 (40.4%)**
	Not Sure	12 (5.9%)
	Trauma¶	1 (0.5%)

Note: some participants provided more than one label for each vignette therefore the n > 203 and the percentages will total > 100%.

Correct response is in **bold** for each vignette.

ADHD = Attention Deficit Hyperactivity Disorder, SD = Standard Deviation

† responses included all descriptions of autism: “autism spectrum condition”, “autism spectrum disorder”, “ASD”, “Aspergers” “possible autism” and “autistic”.
‡ responses included “anxiety disorder”, “anxiety”, “generalised anxiety disorder”, “GAD”, “possible anxiety”, “Social Anxiety” and ‘severe anxiety”
¶ responses included “Complex PTSD” and “trauma”
§ responses included “neurodiverse” and “neurodivergent”
^ responses included “Narcissistic Personality Disorder”, “Borderline Personality Disorder”, “EUPD” and “Personality Disorder”
% responses included “psychosis”, “schizophrenia”, “paranoia”, “paranoid psychosis”, “drug induced psychosis”, “schizoaffective disorder”, “psychotic disorder” “first episode psychosis”.
~ responses include “anxious attachment”, “attachment difficulties”, “attachment disorder”, “attachment issues”, “disordered attachment style”.

Hypothesis Two: The accuracy of identification of autism will be predicted by prior experience, and/or autism-specific training.

Vignette one

Assumption checks for the linear regression analysis found that there was independence of residuals, as assessed by a Durbin-Watson statistic of 1.946. P-P plots were visually inspected, and data were deemed normally distributed. One data point had a high leverage point (0.77); however, it was not an outlier, nor a high influential point, therefore, it was included in the analysis.

The model was not statistically significant, $F(6, 173) = 1.084$, $p=0.374$, adj R^2 = 0.3%; prior experience (number of years working in homelessness services, participant's autism diagnosis, known autistic person in persona life, number of autistic people worked with, and autism-specific training received) did not predict accuracy (discrepancy scores) for vignette one.

Vignette two

Assumption checks for the linear regression analysis found that there was independence of residuals, as assessed by a Durbin-Watson statistic of 2.109. P-P plots were visually inspected, and data were normally distributed. One data point had a high leverage point (0.77) and high influential point (>1); therefore, it was excluded in the analysis.

The model was not statistically significant, $F(6, 172) = 0.551$, $p=0.769$, adj R^2 = -1.5%; prior experience (number of years working in homelessness services, participant's autism diagnosis, known autistic person in persona life, number of autistic people worked with, and autism-specific training received) did not predict accuracy (discrepancy scores) for vignette two.

Hypothesis Three: Prior experience and/or autism-specific training predicts the presence of adaptations to support for autistic service users.

Summary statistics can be found in Table 4.

Vignette one

Assumption checks for the logistic regression found there were nine standardized residuals with a value of -2.615 to – 5.281 standard deviations; these cases were checked and were included in the analysis. All other assumptions were met.

The logistic regression model was not statistically significant, $\chi^2(8) = 9.446$, $p = .306$. The model explained 11.1% (Nagelkerke R^2) of the variance in adaptations made and correctly classified 86.1% of cases. Sensitivity was 98.7%, specificity was 4.3%, positive predictive value was 87.06% and negative predictive value was 33.33%.

Prior experience (number of years working in homelessness services, participant's autism diagnosis, known autistic person in persona life, number of autistic people worked with, and autism-specific training received) did not predict whether staff would make adaptations to support for the service user depicted in vignette one.

Vignette two

Assumption checks for the logistic regression found there were nine standardized residuals with a value of -2.56 to – -4.64 standard deviations; these cases were check and were included in the analysis. All other assumptions were met.

The logistic regression model was not statistically significant, $\chi^2(8) = 5.86$, $p = .663$. The model explained 4.7% (Nagelkerke R^2) of the variance in adaptations made and correctly classified 100% of cases. Sensitivity was 100%, specificity was 0%, positive predictive value was 85.55% and negative predictive value was 0%.

Prior experience (number of years working in homelessness services, participant's autism diagnosis, known autistic person in persona life, number of autistic people worked with, and autism-specific training received) did not predict whether staff would make adaptations to support for the service user depicted in vignette two.

Table 4
Participant response to "Would you make adaptations to the support provision you provide this service user" separated by vignette.

		N (%)
Vignette 1 – Autism (traditional)	Yes	170 (83.7%)
	No	12 (5.9%)
	Unsure	21 (10.4%)
Vignette 2 – Autism (nuanced)	Yes	169 (83.3%)
	No	9 (4.4%)
	Unsure	19 (9.4%)
	Missing	6 (3%)
Vignette 3 - Psychosis	Yes	163 (80.3%)
	No	10 (4.9%)
	Unsure	30 (14.8%)
Vignette 4 – EUPD	Yes	147 (72.4%)
	No	14 (6.9%)
	Unsure	36 (17.7%)
	Missing	6 (3%)
Vignette 4 - Control	Yes	75 (36.9%)
	No	86 (42.4%)
	Unsure	39 (19.2%)
	Missing	3 (1.5%)

Discussion

There is evidence of a higher prevalence of autistic traits in populations experiencing homelessness, compared to the general population. Autistic people experiencing homelessness may face additional barriers when accessing and navigating services, requiring additional support. This study aimed to explore whether staff working in homelessness services were able to accurately identify autism in vignettes of service users experiencing homelessness.

The results showed that compared to vignettes depicting service users with nuanced presentations of autism, psychosis and emotionally unstable personality disorder (EUPD), participants were more accurate at identifying traditional presentations of autism, refuting our initial hypothesis. Participants had similar levels of accuracy when identifying nuanced presentations of autism and psychosis in the vignettes. Participants were least accurate at identifying EUPD in the vignettes. Regression analyses revealed that participants' accuracy at identifying "traditional" and "nuanced" presentations of autism in the vignettes, and whether they would make adaptations when working with these service users, were not predicted by personal or professional experience or training; thus, not supporting our second and third hypotheses. The majority of participants stated that they would make adaptations for all of the service users depicted in all but the "control" vignette, suggesting that staff working in homelessness services are adept at recognising service users' needs and considering needs-led support regardless of diagnostic status.

Interestingly, participants were significantly more accurate at identifying "traditional" compared to "nuanced" autism. This reflects findings from existing literature highlighting nuanced presentations are less likely to be captured using current diagnostic tools and are likely missed due to sociocultural and gendered clinician biases (Lai et al., 2023; Tsirgiotis et al., 2024). Whilst the authors did not examine the role of service user gender in this study, it

is important to consider the confounding impact of gender and nuanced presentations. Autistic women are more likely to experience hidden homelessness (Lockwood Estrin et al., 2022), meaning the current estimated prevalence of homelessness are likely under representative. A 2022 collaboration of 26 stakeholders identified increased staff awareness as a key priority for improving service provision and preventing cycles of homelessness for autistic women (Lockwood Estrin et al., 2022). The findings of the current study indicate the opportunity to increase staff awareness of nuanced presentations of autism.

Personal and professional connection and experience were not found to predict autism awareness in the current study. Existing literature have found a significant link between knowing an autistic person and awareness of the Autism Act, a legal framework protecting the rights of autistic individuals (Dillenburger et al., 2013) . The non-significant finding of the current study may be explained by a growing awareness of autism in the general population. Dillenburger et al. (2013) explored autism awareness in the general population in Northern Ireland via online survey and found 80% of participants indicated high levels of autism awareness. Since the implementation of the Autism Act in 2009, there has been an increasing coverage of autism in popular culture, education, social care and healthcare contexts (Fontes & Pino-Juste, 2022; Kirby & Payne, 2023). Therefore, it is possible that the accuracy of diagnostic labelling in this study reflects a general increase in awareness, rather than awareness stemming from personal or professional knowledge and experience.

In addition to increased autism awareness in the general population, The Autism and Homelessness Toolkit (first developed by Churchard (2019) provides an introduction to autism for staff working in homelessness services. The second edition (Lockwood-Estrin & Churchard, 2024) introduces the topic of autism and gender, and outlines traits more likely to be observed in autistic women based on the current literature. It is possible that the roll out of this toolkit improved participants awareness and recognition of autism in this study

explaining the significantly more accurate recognition of traditional autism, however, this was not formally assessed.

Personal and professional knowledge and experience also did not predict whether a person would make adaptations. Studies exploring the impact of training for administrative staff in a healthcare setting found an increase in adaptations being made for autistic service users (Clark et al., 2016). Although the majority of participants in the current study indicated they would make adaptations for the hypothetical service users, it would be useful to explore whether this reflects service users' experience in reality. The current study does not examine whether completing training or having a personal connection predicts a person's confidence or likelihood of implementing the proposed adaptations; a binary yes/no answer may be reductive and not capture the nuance of this topic. It is possible that participants' responses to whether or not they would make adaptations reflect an "in an ideal world" scenario, and in reality, there may barriers to implementing change.

Although not the focus of this study, it is important to note that the significantly lower accuracy in labelling EUPD may reflect a movement away from personality disorder terminology towards a trauma-informed understanding of difficulties (Lewis & Grenyer, 2009). The alternative labels provided for this vignette listed in Table 3 support this; approximately 21% of participants suggested trauma or attachment difficulties.

Strengths and Limitations

The authors co-developed vignettes with people with lived experience of homelessness and one or more of the depicted diagnoses. The authors also endeavoured to control for gender in the vignettes by using gender neutral pronouns and names.

As with all vignette studies, the ecological validity is limited. Additionally, a response bias might be present; indication of whether participants would make adaptations for the service user be inflated due to desirability effects.

A discrepancy score was calculated as a proxy measure of "accuracy". A continuous measure was chosen to improve statistical power. However, it is possible that the discrepancy score reflects "confidence" in a diagnosis, rather than "accuracy", and thus the research question is not being addressed fully. Some professionals may be more conservative in their rating on a visual analogue scale which may have been interpreted as lower accuracy. Furthermore, only data from the visual analogue scale was considered for the analysis of accuracy; it is possible that participants entered an incorrect answer in the first open text box, indicating inaccuracy, but their answer on the visual analogue scale may reflect higher accuracy as it was a "forced choice" from a selection of fixed options. The study design and analysis limits the interpretations made from the data.

Finally, there was no objective measure of autism knowledge included in the study. It is possible that despite completing autism training, participant's knowledge did not improve.

Future Research and Recommendations

Further research is needed to explore the implementation of adaptations in reality. This research may explore whether autistic service users require more, or more specific, adaptations than non-autistic service users. It would also be useful to investigate the impact of adaptations from both a staff and service user perspective, examining any discrepancies. Although we did not find in this study that training predicted recognition or accommodations, it would be useful to explore changes to staff confidence, awareness and behaviour pre and post training.

Conclusions

Participants were most accurate at identifying traditional presentations of autism, compared to nuanced autism, psychosis and EUPD. Personal and professional connection and experience did not predict accuracy nor whether participants would make adaptations. This can possibly be explained by growing autism awareness in the general population. Although recognition of traditional autism was the strongest in this study, nuanced autism is less well-recognised and improved awareness of the full range of autism presentations is needed. The findings also suggest that improvement awareness of mental health difficulties (e.g. psychosis, EUPD) may be beneficial in homelessness settings. Future research could explore the implementation of adaptations, and service users' experience of adaptations.

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Executive Summary

Title: Staff recognition of autism and autistic traits in homelessness services: a vignette study

Why this research was conducted:

Evidence suggests autistic people are overrepresented in homelessness populations. There is limited evidence to explain why this is, however, it is likely that core features of autism including differences in social interaction and communication, a preference for sameness, and sensory sensitivities contribute to the increased risk of homelessness. Wider factors also likely play a role; for example, limited recognition and understanding of autism within a system, and limited empathy from others may lead to reduced access to statutory services and breakdown in housing. In addition to increasing risk of homelessness, these factors are possible barriers to accessing and navigating housing services and breaking cycles of homelessness.

In addition, autistic populations experience higher prevalences of mental health difficulties compared to the general population. Similarly, there are elevated prevalences of mental health difficulties within homelessness populations. It is possible, therefore, that mental health difficulties experienced by people experiencing homelessness may overshadow autistic traits, and staff may be more likely to recognise and respond to mental health needs, thus leading to the exclusion of adjustments for autistic needs.

Staff recognition of autism and related needs will likely improve access to homelessness services. Autism specific training and personal connection to autism have been found to predict whether staff implement adaptations in youth offending and mental health settings. To date, this has not been explored in a homelessness context.

This study aimed to explore the extent to which staff working in homelessness services identify autism in service users, and whether staff consider making adaptations to service users support.

We predicted that:

1. Staff working in homelessness services will recognise and label autism less accurately than mental health diagnoses (e.g., psychosis, personality disorder).
2. Prior experience and/or autism-specific training will predict how accurately staff recognise and label autism.
3. Prior experience and/or autism-specific training predicts whether staff make adaptations for autistic service users.

What the research involved:

Five vignettes (brief descriptions of hypothetical service users) were co-developed with experts by experience to describe people experiencing homelessness with:

1) Autism (traditional presentation)
2) Autism (nuanced presentation)
3) Psychosis
4) Emotionally Unstable Personality Disorder (EUPD)
5) No co-occurring mental health or neurodevelopmental conditions

The vignettes were shown in a random order, and participants were asked "*please state the diagnosis (if any) you think this service user might have*". Participants were also asked to rate on a scale of 0-100 how likely it was that the person described in the vignette was diagnosed with each of the following: autism, depression, generalised anxiety disorder, personality disorder, psychosis, substance misuse.

Participants were also asked about their personal and professional connection and any training relating to each of the conditions described in the vignettes. A total of 203 staff working face-to-face with people experiencing homelessness in a homelessness service in the UK completed an online survey.

What we found:

Participants were more accurate at labelling the traditional autistic vignette compared to the nuanced autism, psychosis and EUPD. Participants were least accurate at labelling the EUPD vignette. Prior experience (personal or professional) or training did not significantly predict accuracy, nor whether participants stated they would make adaptations.

Conclusions:

The findings contribute to our understanding of autism in homelessness contexts. The majority of staff were proficient at recognising traditional autism presentation; this could be explained by recent government initiatives to improve inclusion for neurodivergent individuals, and an increasing representation of autism in the media. However, it is important to note that nuanced autism presentation was less well recognised by the participants in this study, suggesting the need to improve staff understanding of the range of autism presentations. It is possible that people accessing homelessness services may have missed diagnoses in childhood due to a nuanced presentation of autism, which may further contribute to the cycle of homelessness and lead to further barriers to support.

The majority of participants indicated that they would make adaptations to support for each of the vignettes, however, it is not clear whether adaptations are appropriate and efficient. Further research is needed to determine the experience of autistic service members

receiving adaptations to support. It is also unclear whether training has a significant impact on autism awareness and adaptations in this population.

Connecting Reflective Narrative

Nine hours before the start of clinical training, I submitted minor corrections and completed my PhD. Coming straight from one doctorate course to another had many benefits. My PhD experience was positive, and I was confident in my ability to design and carry out meaningful research. I had a grasp on what would be a realistic and manageable size project(s) to complete on the DClinPsy, allowing myself to be "good enough" to provide space to focus on clinical skills.

Jumping from a research PhD to a clinical training doctorate also had its challenges. The criteria for projects and the approach to research was different, which meant the flexibility and trust that I had during my PhD was reduced. This was frustrating for me as my project ideas had to be adapted to fit in with the course restrictions. Nonetheless, on the whole I managed to hold on to my values as a researcher, develop new skills, and I am proud of the research I have produced.

I chose to continue conducting research in the field of autism throughout the DClinPsy. This allowed me to prioritise headspace for placement and academic aspects of the course, as I was developing an existing knowledge base rather than starting from scratch. Secondly, my connections in the autism research field became invaluable supervisors and collaborators which helped to streamline processes. I have chosen topics for my DClinPsy research that span a variety of topics (clinician expertise, homelessness, co-occurring mental health conditions) from an autistic lens, with a thread of improving access to services throughout.

Service Improvement Project

I came to the DClinPsy assuming that, as clinicians working across services, autistic needs and how to make adaptations would be embedded in the curriculum. I was surprised that autism teaching was siloed into child and adolescent and learning disability modules. To me,

this mirrored many autistic adults' experiences of accessing services: limited understanding and expertise. I spoke to friends on different courses who had similar experiences and shared dismay at the limited teaching about autism and neurodivergence more broadly. I discussed this concern with the academic director who encouraged me to pursue this as a service improvement project.

The project was really rewarding to complete. I was able to see the recommendations of the project be implemented for subsequent cohorts of trainees, and I look forward to seeing how it progresses. Whilst I am proud of this piece of work, I recognise that it is a small part of the puzzle, and I hope to take it forward for other DClinPsy courses and to drive change in wider NHS services.

Theory Driven Research Project

Prior to starting the DClinPsy, I was involved in a workshop to define a research agenda for homelessness and autistic women which connected me with my TDRP supervisors. I had not initially considered conducting research in the homelessness field as part of the doctorate, however, after discussions with my internal supervisor I felt it aligned with my interest in improving access to services and supporting populations with multiple disadvantages.

I was able to co-produce vignettes with experts by experience which challenged my assumptions about people accessing homelessness services. In my final year, I am on placement in a homelessness service, which I probably would not have opted for if it hadn't been for the research project. Being part of the service now has helped me reflect on how my research can be applied in teams; I am currently delivering autism related training to improve staff awareness and recognition of autism which leads on from the recommendations of my TDRP.

Systematic Review of the Literature

My SRL was an act of serendipity. I had originally planned to focus on a different topic (the validity of routine outcome measures for autistic populations), however, it fell through when I found an almost identical review during the screening phase. That evening, whilst I was frantically searching for a new topic, the course director emailed my cohort to see if anyone had an interest in an SRL about the crossover of hoarding and neurodivergence. My interest piqued and we met to agree on the scope. I was grateful for the opportunity to learn about a new clinical area (hoarding), and it felt like a balance of expanding existing knowledge (neurodivergence) and adding a new angle.

Whilst the topic is interesting, this process has reminded me that systematic reviews are the bane of my existence; sifting through specific details does not fit with my "big picture" thinking style and I find the whole process challenging, despite logically knowing it is quite a straightforward task. I am very glad to have completed it and hope that I do not have to do another systematic review anytime soon.

Going forward

Conducting research on the DClinPsy has allowed me to reflect on and consider the application of research to clinical services. Previously, I have felt research stays in an academic bubble and that researchers prioritise getting published above and beyond any dissemination to services. From completing these projects, I have a better understanding of the importance of being "on the ground" and involved in areas in which you are conducting research to ensure that the aims are meeting the needs of the community and can have a realistic positive impact. I look forward to carrying these themes and the recommendations from these projects through to my future career as a researcher and a clinician.

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They say that your cohort is your biggest support network, and I can attest to that. The solidarity and resilience of the 2022 cohort has kept me going. A special shout out to Mel, Zara, Nat, Robyn, Louise, Tori, Rhiannon, Ellen, Amy and Amber, without whom I would not have completed the doctorate. Although I have not loved this journey, I have loved doing it alongside you and am forever grateful for the light you provided in times of darkness. I am very lucky to be leaving with such a brilliant, inspiring and supportive group of friends.

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Finally, my partner, Tom. You get a whole paragraph in this thesis rather than being listed with the dogs (like in my PhD acknowledgements). I am so lucky to have had you by my side throughout the past three years. Thank you for doing everything in your power to make this journey easier for me. I cannot wait for our next chapter together.

Appendices

Appendix A: SRL: Critical Appraisal Skills Programme Checklist:

CASP Checklist:
For Descriptive/Cross-Sectional Studies

Reviewer Name:	
Paper Title:	
Author:	
Web Link:	
Appraisal Date:	

During critical appraisal, never make assumptions about what the researchers have done. If it is not possible to tell, use the "Can't tell" response box. If you can't tell, at best it means the researchers have not been explicit or transparent, but at worst it could mean the researchers have not undertaken a particular task or process. Once you've finished the critical appraisal, if there are a large number of "Can't tell" responses, consider whether the findings of the randomised controlled trial are trustworthy and interpret the results with caution.

Section A: Are the results valid?	
1. Did the study address a clearly focused issue?	☐ Yes ☐ No ☐ Can't Tell
CONSIDER: *A question can be 'focused' in terms of* • *the population studied* • *the risk factors studied* • *is it clear whether the study tried to detect a beneficial or harmful effect* • *the outcomes considered*	
2. Did the authors use an appropriate method to answer their question?	☐ Yes ☐ No ☐ Can't Tell

CONSIDER: • *Is a descriptive/cross-sectional study an appropriate way of answering the question* • *did it address the study question*	
3. Were the subjects recruited in an acceptable way?	☐Yes ☐ No ☐ Can't Tell
CONSIDER: *We are looking for selection bias which might compromise the generalisability of the findings:* • *Was the sample representative of a defined population* • *Was everybody included who should have been included*	
4. Were the measures accurately measured to reduce bias?	☐Yes ☐ No ☐ Can't Tell
CONSIDER: *Look for measurement or classification bias:* • *did they use subjective or objective measurements* • *do the measurements truly reflect what you want them to (have they been validated)*	
5. Were the data collected in a way that addressed the research issue?	☐Yes ☐ No ☐ Can't Tell
CONSIDER: • *if the setting for data collection was justified* • *if it is clear how data were collected (e.g., interview, questionnaire, chart review)* • *if the researcher has justified the methods chosen* • *if the researcher has made the methods explicit (e.g. for interview method, is there an indication of how interviews were conducted?)*	
6. Did the study have enough participants to minimise the play of chance?	☐Yes ☐ No ☐ Can't Tell
CONSIDER: • *if the result is precise enough to make a decision* • *if there is a power calculation. This will estimate how many subjects are needed to produce a reliable estimate of the measure(s) of interest.*	
7. How are the results presented and what is the main result?	☐Yes ☐ No ☐ Can't Tell

CONSIDER: • *if, for example, the results are presented as a proportion of people experiencing an outcome, such as risks, or as a measurement, such as mean or median differences, or as survival curves and hazards* • *how large this size of result is and how meaningful it is* • *how you would sum up the bottom-line result of the trial in one sentence*	
8. Was the data analysis sufficiently rigorous?	☐ Yes ☐ No ☐ Can't Tell
CONSIDER: • *if there is an in-depth description of the analysis process* • *if sufficient data are presented to support the findings*	
9. Is there a clear statement of findings?	☐ Yes ☐ No ☐ Can't Tell
CONSIDER: • *if the findings are explicit* • *if there is adequate discussion of the evidence both for and against the researchers' arguments* • *if the researchers have discussed the credibility of their findings* • *if the findings are discussed in relation to the original research questions*	
10. Can the results be applied to the local population?	☐ Yes ☐ No ☐ Can't Tell
CONSIDER: • *the subjects covered in the study could be sufficiently different from your population to cause concern.* • *your local setting is likely to differ much from that of the study*	
11. How valuable is the research?	☐ Yes ☐ No ☐ Can't Tell
CONSIDER: • *one descriptive/cross-sectional study rarely provides sufficiently robust evidence to recommend changes to clinical practice or within health policy decision making* • *if the researcher discusses the contribution the study makes to existing knowledge (e.g., do they consider the findings in relation to current practice or policy, or relevant research-based literature?)* • *if the researchers have discussed whether or how the findings can be transferred to other populations*	

APPRAISAL SUMMARY: *List key points from your critical appraisal that need to be considered when assessing the validity of the results and their usefulness in decision-making.*

Positive/Methodologically sound	Negative/Relatively poor methodology	Unknowns

Appendix B: SIP - Trainee Survey

Please note, the researchers are aware that preferences around language varies. We alternate between person-first ("person with autism") and identify-first ("autistic person") language throughout this survey.

1) Please indicate your gender identity:
   a) Male (including trans man)
   b) Female (including trans woman)
   c) Non-binary / gender fluid
   d) Other gender not listed (please specify)

      _____

   e) Prefer not to say.

2) Please enter your age in years:

3) Please indicate your ethnicity:
   a) Asian
   b) Arab
   c) Black African
   d) Black Caribbean
   e) Mixed/Multiple Ethnicities
   f) White British
   g) White Other
   h) Other not listed (please specify)

      _____

4) Which year did you start the Oxford Doctorate in Clinical Psychology?
   a) 2018
   b) 2019
   c) 2020
   d) 2021
   e) 2022

5) Do you have an autism diagnosis, or do you identify as being autistic?
   a) Formal autism diagnosis
   b) Self-identify as autistic (no formal diagnosis)
   c) Not autistic
   d) Prefer not to say.

6) Do you have any other neurodivergent (e.g., ADHD, dyslexia) condition? If so, please specify:
   a) No
   b) Yes (formal diagnosis) _____

The following set of questions will ask about your experience of autism prior to starting the Oxford Doctorate in Clinical Psychology (DClinPsych).

7) Do you know anyone who has an autism diagnosis in your own (personal) life? Please select all that apply:
   a) Close Family Member(s)

b) Extended Family Member(s)
c) Friend(s)
d) Romantic Partner(s)
e) Colleague(s)
f) Other (please specify) _____
g) Prefer not to say.
h) I do not know any autistic people in my own (personal) life.

8) Have you worked with autistic service users prior to DClinPsych training?
   a) Yes
   b) No
   c) Unsure

9) Please estimate how many autistic service users you have worked with (to the nearest 10 if necessary):

10) Please select the context(s) in which you worked with autistic service users prior to DClinPsych training:
   a) Primary care (e.g. IAPT or similar)
   b) Community mental health teams
   c) Inpatient mental health teams
   d) Specialist neurodevelopmental team (inpatient or outpatient)
   e) Specialist outpatient mental health teams
   f) Autism diagnostic services
   g) Charity sector
   h) Education sector
   i) Research
   j) Other (please specify) _____

11) Have you received any autism-specific training prior to starting the DClinPsych?
   a) Yes
   b) No

12) Please provide details (e.g. duration, context, content, when this took place) about the autism-specific training you completed. Example: "a two-day training organised by the National Autistic Society about adaptations to CBT for autistic adults with anxiety in December 2019"

13) What did you find helpful about this training?

14) What did you find unhelpful about this training?

15) Please rate yourself on the following items reflecting how you felt **immediately prior to starting your DClinPsych training** (0 as the lowest, 10 as the highest):

	0 1 2 3 4 5 6 7 8 9 10
Knowledge about autism	

Knowledge about working clinically with autistic service users	
Confidence working clinically with autistic service users	
Competence working clinically with autistic service users	

16) Please rate yourself on the following items reflecting how you currently feel (0 as the lowest, 10 as the highest):

	0 1 2 3 4 5 6 7 8 9 10
Knowledge about autism	
Knowledge about working clinically with autistic service users	
Confidence working clinically with autistic service users	
Competence working clinically with autistic service users	

Would you like to add anything about your responses to the above questions (e.g., factors influencing scores)?

The following questions will ask about your opinion regarding the autism-related teaching on the Oxford Doctorate in Clinical Psychology (DClinPsych). When answering these questions you may wish to consider the content of teaching (i.e., what is covered), the structure (i.e., when in the course the teaching takes place, the frequency), and the format (i.e., dedicated lectures/seminars vs. integration of topics, didactic vs. experiential, group work, depth of content, experts by experience or experts by profession)

17) Please rate the following aspects of the current autism-related teaching on the following scale:
1- Needs Significant Improvement, 2 - Needs Slight Improvement, 3 - Meets Training needs, 4 - Exceeds Training Needs, 5 - Outstanding

	Needs Significant Improvement	Needs Slight Improvement	Meets Training Needs	Exceeds Training Needs	Outstanding	Unsure
	0	1	2	3	4	5
Depth of Content						
Breadth of Content						
Structure within the timetable						

Format of teaching sessions	
Other (Please state)	

If you would like to add any further detail about your above ratings, please provide here:

---

18) Please provide a brief summary of the autism-relevant teaching you can remember having on the DClinPsych to date (broad topics/lecture headings):

_____

19) In your opinion, what are the strengths of the current autism related teaching on the Oxford DClinPsych?

20) In your opinion, what are areas for improvement for autism related teaching on the Oxford DClinPsych?

21) Do you think your personal experience (knowing an autistic person or being autistic yourself) has impacted your perceptions/experience of the autism-related teaching on the DClinPsych? If yes, please elaborate on how.
    a) No
    b) Yes _____
    c) Prefer not to say.

22) What topics would you like autism-related teaching to cover (including those already on the curriculum, if applicable)?

23) In your opinion, how could autism related teaching be best implemented within the curriculum? (e.g., modality of teaching, type of teacher)

24) In your opinion, what are potential barriers to implementing changes to autism-related teaching on the Oxford DClinPsych? (e.g., for the staff team/teaching staff, national context, other)

Instructions: Please answer the following questions. If you do not know an answer, please select “don’t know” (do not guess). Please refrain from looking up answers to questions you do not know.

1) Current estimates suggest that autism affects approximately _____ percent of the population?
    a) Less than 1%
    b) Between 1%-2%
    c) Between 3%-5%
    d) Greater than 5%

e) Don't Know

2) Autism is approximately ____ times more likely to be diagnosed in males than females.
   a) 0 times (it is diagnosed in boys and girls equally)
   b) 2 times
   c) 3 times
   d) 4 times
   e) Don't Know

3) Identification rates of autism are:
   a) Equal across racial and ethnic groups
   b) Unequal across racial and ethnic groups with White children being diagnosed more frequently and earlier than children from diverse racial and ethnic backgrounds.
   c) Unequal across racial and ethnic groups with children from diverse racial and ethnic backgrounds being diagnosed more frequently and earlier than White children.
   d) Unknown pertaining to frequency across racial and ethnic groups
   e) Don't Know

4) Approximately _____ percent of individuals with autism also have an intellectual disability.
   a) 25%
   b) 33%
   c) 50%
   d) 66%
   e) Don't Know

5) In order to receive a diagnosis of autism one must meet the following criteria: _____ and _____
   a) Attention; social communication deficits.
   b) Social communication; restricted and repetitive patterns of behaviour, interests, and activities
   c) Intellectual/cognitive functioning; social communication deficits
   d) Social communication; sensory processing deficits
   e) Don't Know

6) Autism…
   a) Can be diagnosed in adulthood.
   b) Can develop in adulthood.
   c) Cannot be diagnosed in adulthood.
   d) Does not affect adults.
   e) Don't Know

7) Approximately ____ percent of individuals with autism also have a co-occurring mental health diagnosis.
   a) 20-30%

b) 30-40%
c) 50-60%
d) 70-80%
e) Don't Know

8) Autism is a _____
   a) Neurodevelopmental Disorder
   b) Trauma-and Stressor-Related Disorder
   c) Disruptive, Impulse-Control, and Conduct Disorder
   d) Neurocognitive Disorder
   e) Mental Health Condition
   f) Don't know.

9) Autism diagnoses are primarily based on:
   a) Behavioural observations and parent/caregiver interviews
   b) Neuroimaging
   c) Genetic testing
   d) Child interviews
   e) Don't Know

---

10) Is there anything else you would like to add regarding the autism-related teaching on the Oxford DClinPsych?

Thank you very much for completing this online survey.

Appendix C: SIP - Staff Survey

[information sheet and consent page omitted]

The following questions are about your demographic information.

Please note, the researchers are aware that preferences around language varies. We alternate between person-first ("person with autism") and identify-first ("autistic person") language throughout this survey.

1) Please indicate your gender identity:
   a) Male (including trans man)
   b) Female (including trans woman)
   c) Non-binary / gender fluid
   d) Other gender not listed (please specify)
      _____
   e) Prefer not to say.

2) Please enter your age in years:

3) Please indicate your ethnicity:
   a) Asian
   b) Arab
   c) Black African
   d) Black Caribbean
   e) Mixed/Multiple Ethnicities
   f) White British
   g) White Other
   h) Other not listed (please specify)
      _____

4) Please indicate your staff role
   a) Clinical Tutor
   b) Academic Tutor
   c) Research Tutor
   d) Director
   e) Other _____

5) Do you have an autism diagnosis, or do you identify as being autistic?
   a) Formal autism diagnosis
   b) Self-identify as autistic (no formal diagnosis)
   c) Not autistic
   d) Prefer not to say.

6) Do you have any other neurodivergent (e.g., ADHD, dyslexia) condition? If so, please specify:
   a) No
   b) Yes (formal diagnosis) _____
   c) Yes (self-diagnosis) _____

d) Prefer not to say.

The following set of questions will ask about your experience of autism.

7) Do you know anyone who has an autism diagnosis in your own (personal) life? Please select all that apply:
   a) Close Family Member(s)
   b) Extended Family Member(s)
   c) Friend(s)
   d) Romantic Partner(s)
   e) Colleague(s)
   f) Other (please specify) _____
   g) Prefer not to say.
   h) I do not know any autistic people in my own (personal) life.

8) Have you worked with autistic service users?
   a) Yes
   b) No
   c) Unsure
9) Please estimate how many autistic service users you have worked with (to the nearest 10 if necessary):
10) Please select the context(s) in which you worked with autistic service users:
   a) Primary care (e.g. IAPT or similar)
   b) Community mental health teams
   c) Inpatient mental health teams
   d) Specialist neurodevelopmental team (inpatient or outpatient)
   e) Specialist outpatient mental health teams
   f) Autism diagnostic services
   g) Charity sector
   h) Education sector
   i) Research
   j) Other (please specify) _____

11) Have you received any autism-specific training?
   a) Yes
   b) No

12) Please provide details (e.g. duration, context, content, when this took place) about the autism-specific training you completed. Example: "a two-day training organised by the National Autistic Society about adaptations to CBT for autistic adults with anxiety in December 2019"

13) What did you find helpful about this training?

14) What did you find unhelpful about this training?

15) Please rate yourself on the following items reflecting how you currently feel (0 as the lowest, 10 as the highest):

0 1 2 3 4 5 6 7 8 9 10

Knowledge about autism	
Knowledge about working clinically with autistic service users	
Confidence working clinically with autistic service users	
Competence working clinically with autistic service users	

Would you like to add anything about your responses to the above questions (e.g., factors influencing scores)?

The following questions will ask about your opinion regarding the autism-related teaching on the Oxford Doctorate in Clinical Psychology (DClinPsych). When answering these questions you may wish to consider the content of teaching (i.e., what is covered), the structure (i.e., when in the course the teaching takes place, the frequency), and the format (i.e., dedicated lectures/seminars vs. integration of topics, didactic vs. experiential, group work, depth of content, experts by experience or experts by profession)

16) Do you currently teach trainees on the Oxford DClinPsych?
    a) Yes
    b) No
    c) Prefer not to say.

17) OPTIONAL: What module do you teach trainees on the Oxford DClinPsych? (e.g. Older adults, Working Age adults, Child, Research etc.)

18) When delivering teaching to the Oxford DClinPsych trainees, in what way do you incorporate autism into your teaching?

19) Please rate the following aspects of the current autism-related teaching on the following scale:
    1- Needs Significant Improvement, 2 - Needs Slight Improvement, 3 - Meets Training needs, 4 - Exceeds Training Needs, 5 - Outstanding

	Needs Significant Improvement	Needs Slight Improvement	Meets Training Needs	Exceeds Training Needs	Outstanding	Unsure
	0	1	2	3	4	5
Depth of Content						
Breadth of Content						
Structure within the timetable						
Format of teaching sessions						
Other (Please state)						

If you would like to add any further detail about your above ratings, please provide here:

---

20) In your opinion, what are the strengths of the current autism related teaching on the Oxford DClinPsych?

21) In your opinion, what are areas for improvement for autism related teaching on the Oxford DClinPsych?

22) Do you think your personal experience (knowing an autistic person or being autistic yourself) has impacted your perceptions/experience of the autism-related teaching on the DClinPsych? If yes, please elaborate on how.
    a) No
    b) Yes _____
    c) Prefer not to say.

23) What topics would you like autism-related teaching to cover (including those already on the curriculum, if applicable)?

24) In your opinion, how could autism related teaching be best implemented within the curriculum? (e.g., modality of teaching, type of teacher)

25) In your opinion, what are potential barriers to implementing changes to autism-related teaching on the Oxford DClinPsych? (e.g., for the staff team/teaching staff, national context, other)

Instructions: Please answer the following questions. If you do not know an answer, please select "don't know" (do not guess). Please refrain from looking up answers to questions you do not know.

1) Current estimates suggest that autism affects approximately _____ percent of the population?
    a) Less than 1%
    b) Between 1%-2%
    c) Between 3%-5%
    d) Greater than 5%
    e) Don't Know

2) Autism is approximately ____ times more likely to be diagnosed in males than females.
    a) 0 times (it is diagnosed in boys and girls equally)
    b) 2 times
    c) 3 times
    d) 4 times
    e) Don't Know

3) Identification rates of autism are:
   a) Equal across racial and ethnic groups
   b) Unequal across racial and ethnic groups with White children being diagnosed more frequently and earlier than children from diverse racial and ethnic backgrounds.
   c) Unequal across racial and ethnic groups with children from diverse racial and ethnic backgrounds being diagnosed more frequently and earlier than White children.
   d) Unknown pertaining to frequency across racial and ethnic groups
   e) Don't Know

4) Approximately _____ percent of individuals with autism also have an intellectual disability.
   a) 25%
   b) 33%
   c) 50%
   d) 66%
   e) Don't Know

5) In order to receive a diagnosis of autism one must meet the following criteria: _____ and _____
   a) Attention; social communication deficits.
   b) Social communication; restricted and repetitive patterns of behaviour, interests, and activities
   c) Intellectual/cognitive functioning; social communication deficits
   d) Social communication; sensory processing deficits
   e) Don't Know

6) Autism…
   a) Can be diagnosed in adulthood.
   b) Can develop in adulthood.
   c) Cannot be diagnosed in adulthood.
   d) Does not affect adults.
   e) Don't Know

7) Approximately ____ percent of individuals with autism also have a co-occurring mental health diagnosis.
   a) 20-30%
   b) 30-40%
   c) 50-60%
   d) 70-80%
   e) Don't Know

8) Autism is a _____
   a) Neurodevelopmental Disorder
   b) Trauma-and Stressor-Related Disorder
   c) Disruptive, Impulse-Control, and Conduct Disorder
   d) Neurocognitive Disorder

e) Mental Health Condition
f) Don't know.

9) Autism diagnoses are primarily based on:
   a) Behavioural observations and parent/caregiver interviews
   b) Neuroimaging
   c) Genetic testing
   d) Child interviews
   e) Don't Know

---

10) Is there anything else you would like to add regarding the autism-related teaching on the Oxford DClinPsych?

Thank you very much for completing this online survey.

We would like to invite you to participate in a focus group as outlined in the information sheet. Once you submit your responses, you will be redirected to a separate survey where you can opt in to the focus group.

Appendix D: SIP - Adapting the Autism Spectrum Knowledge Scale Professional Version Revised (ASKSP-R).

Below is the 25 item ASKSP-R. The 16 items that were removed from the survey have red font. Items were removed where the question was deemed by the researcher to be less relevant to clinical psychologists (as opposed to school-based professionals who took part in the initial study), less relevant to a UK population (as opposed the United States as included in the study), and/or if the question was deemed to potentially perpetuate negative stigma/stereotypes about autism.

Amendments are highlighted. Amendments were made to minimise deficit/disorder-based language, and to update the items based on recent research (e.g. updates about male:female ratio and proportion of autistic people experiencing mental health difficulties).

Instructions: Please answer the following questions. If you do not know an answer, please select "don't know" (do not guess). Please refrain from looking up any questions you do not know.

1. Current estimates suggest that autism ~~spectrum disorder~~ affects approximately _____ percent of the population?
    a. Less than 1%
    b. Between 1%-2%
    c. Between 3%-5%
    d. Greater than 5%
    e. Don't Know

2. Autism ~~spectrum disorder~~ is approximately ____ times more likely to be diagnosed in boys than girls.
    a. 0 times (it is diagnosed in boys and girls equally)
    b. 2 times
    c. 3 times
    d. 4 times
    ~~e. 5 times~~
    f. Don't Know

3. Please select the risk factor that is not associated with autism spectrum disorder:
    a. Advanced paternal age
    b. Family history of autism spectrum disorder
    c. Vaccines
    d. Pollution
    e. Don't Know

4. Identification rates of autism ~~spectrum disorder~~ are:
    a. Equal across racial and ethnic groups
    b. Unequal across racial and ethnic groups with White children being diagnosed more frequently and earlier than children from diverse racial and ethnic backgrounds.
    c. Unequal across racial and ethnic groups with children from diverse racial and ethnic backgrounds being diagnosed more frequently and earlier than White children.
    d. Unknown pertaining to frequency across racial and ethnic groups
    e. Don't Know

5. Approximately _____ percent of individuals with autism ~~spectrum disorder~~ also have an intellectual disability.
    a. 25%
    b. 33%
    c. 50%
    d. 66%
    e. Don't Know

6. In order to receive a diagnosis of autism ~~spectrum disorder~~ one must meet the following criteria: ___ and ____ ~~exhibit deficits in _____ and exhibit _____~~.
    a. Attention; social communication deficits.
    b. Social communication; restricted and repetitive patterns of behaviour, interests, and activities
    c. Intellectual/cognitive functioning; social communication deficits
    d. Social communication; sensory processing deficits
    e. Don't Know

7. The following professional may diagnose autism spectrum disorder:
    a. Licensed Psychologist
    b. School Psychologist
    c. Teacher
    d. Occupational Therapist
    e. Don't Know

8. In the United States public school setting, children with autism spectrum disorder may be eligible for special education if:
    a. A medical doctor (e.g., paediatrician) independently determines it is necessary.
    b. The students' disability has an educational impact.
    c. The student says they want special education services.
    d. Their teacher independently decides it is necessary.
    e. Don't Know

9. Autism spectrum disorder…
    a. Can be diagnosed in adulthood.
    b. Can develop in adulthood.
    c. Cannot be diagnosed in adulthood.
    d. Does not affect adults.
    e. Don't Know

10. Which of the following is not an evidence-based intervention for individuals with autism spectrum disorder?
    a. Video modelling
    b. Applied behaviour analysis.
    c. Pivotal response training
    d. Equine therapy
    e. Don't Know

11. Which of the following is an evidence-based intervention for individuals with autism spectrum disorder?
    a. Equine therapy
    b. Food (e.g., gluten) restriction
    c. Pivotal response training
    d. Sensory Integration Therapy

e. Don't Know

12. Up to ____ percent of individuals with autism ~~spectrum disorder~~ also have a co-occurring mental health diagnosis.
    a. 20 – 30 %
    b. 30 – 40 %
    c. 50 – 60 %
    d. 70 – 80 %
    e. Don't Know

13. When assessing a bilingual child for autism spectrum disorder, it is important to obtain language information regarding:
    a. The child's native language development
    b. The child's English language development
    c. The child's English language development and native language development
    d. Information regarding the English language development of the child only between birth to 2 years of age
    e. Don't know.

14. According to the DSM-5, a diagnosis of autism spectrum disorder must also be accompanied by determining severity within _____ possible levels.
    a. 2
    b. 3
    c. 4
    d. 5
    e. Don't Know

15. Autism spectrum disorder is a _____
    a. Neurodevelopmental Disorder
    b. Trauma-and Stressor-Related Disorder
    c. Disruptive, Impulse-Control, and Conduct Disorder
    d. Neurocognitive Disorder
    e. Mental Health Condition
    f. Don't know.

16. Which of the following is not an example of a social communication and interaction deficit:
    a. Poor eye contact
    b. Poor reciprocal conversation
    c. Poor articulation
    d. Difficulties maintaining friendships.
    e. Don't Know

17. Which of the following is not an example of a restricted and repetitive pattern of behaviour or interest:
    a. Stereotypic motor movements
    b. Strict adherence to a routine
    c. Echolalia
    d. Obsessive behaviours
    e. Don't Know

18. Autism ~~spectrum disorder~~ diagnoses are primarily based on:
    a. Behavioural observations and parent/caregiver interviews
    b. Neuroimaging
    c. Genetic testing
    d. Child interviews
    e. Don't Know

19. Siblings of children with autism spectrum disorder are…
    a. Less at risk for developing the disorder.
    b. At a higher risk for developing the disorder
    c. At no more or less risk for developing the disorder
    d. It is unknown if siblings of children with autism spectrum disorder are more or less at risk for developing the disorder.
    e. Don't Know

20. With regard to reading, children with autism spectrum disorder are more likely to experience difficulties with:
    a. Reading speed
    b. Reading comprehension
    c. Phonological awareness
    d. Reading accuracy
    e. Don't Know

21. In general, in the United States, diagnostic tools for autism spectrum disorder are:
    a. Standardized in many other languages besides English.
    b. Translated into many other languages, but not standardized in this format.
    c. Include bilingual learners in the standardization sample.
    d. Sometimes translated into Spanish, but not standardized in this format.
    e. Don't know.

22. By the age of _____ years a diagnosis of autism spectrum disorder can be reliably diagnosed.
    a. 2
    b. 4
    c. 6
    d. 8
    e. Don't Know

23. The majority of children with autism spectrum disorder are diagnosed after age:
    a. 3 years
    b. 4 years
    c. 5 years
    d. 6 years
    e. Don't Know

24. Autism prevalence rates across the globe:
    a. Are highly consistent with the prevalence rates in the United States
    b. Are extremely varied.
    c. Are much higher in African countries than all other countries.
    d. Are higher in countries where English is the national language.
    e. Don't Know

25. Clinicians must identify all but ____ when making a diagnosis of autism spectrum disorder?
    a. If disorder occurs with or without intellectual impairment
    b. If the disorder is associated with a known medical or genetic condition or environmental factor
    c. If the disorder is associated with known sensory sensitivities
    d. If the disorder occurs with or without accompanying language impairment
    e. Don't Know

Trainee Cronbach Alpha = 0.567
Staff Cronbach Alpha = 0.413

Appendix E: SIP - Focus Group Topic Guide

Purpose: The purpose of these focus groups is to gather reflections from course staff in response to themes drawn from survey data. Some participants may have completed the online staff survey. Although the focus group provides opportunity to reflect and expand on similar topics, the same questions will *not* be repeated. The researchers hope to gather a range of perspectives.

Ethical considerations: The focus groups will be audio recorded for purposes of analysis. Audio recordings will be deleted once transcriptions are completed and quality checked. Participants will be kept anonymous; no personal or identifiable details will be included in the report. No quotes will be associated with individual staff members.

Staff can withdraw from the focus groups at any point during the session. Withdrawal of data will not be possible after the focus group as it will not be possible to identify individual quotes.

Researcher Position: I (Vicky Milner) will be facilitating the focus groups. It is important to acknowledge my position as a trainee clinical psychologist on the Oxford course with a background in autism research.

This project gained support approval from the course (via PAS and internal ethics) and the academic director. My role is to provide space to facilitate conversation on this topic and to encourage discussion from a range of perspectives about how we approach autism teaching.

Themes:
The following themes have been elicited from staff and trainee online survey data as a springboard for focus group discussion. We invite focus group participants to reflect upon these within the focus group and share their perspective. Participants can choose how or if they wish to focus their discussion on particular themes. Focus group discussion may also generate ideas around themes not noted below.

- Involving experts by experience in teaching; what are the barriers and facilitators of this?
- Segregated (specific sessions about autism) vs. integrated (weaved into existing/other sessions) teaching about autism.
- Directive (or “manualised”/ “autism specific”) approaches to supporting autistic people vs. general “person centred” approaches.
- The position of autism-related teaching within the curriculum (including but not limited to consideration for trainees on WAA/OA placements, implications of autism being included in LD/CAMHS teaching)
- Consideration of autistic trainees
- Consideration of other diversities (e.g. race, gender) in teaching compared to autism/neurodiversity.

- Language use
- Keeping up to date with a fast-moving topic
- The limits of a full curriculum; how are “priorities” determined?

Appendix F: SIP – Table Summaries of Quantitative Survey Data

Table F1.
Self-rated knowledge, competence, and confidence

	Trainee				Staff	
	Prior to training		Currently		Currently	
	Range	Mean (SD)	Range	Mean (SD)	Range	Mean (SD)
Knowledge about autism	0-9	5.02 (2.57)	1-10	6.23 (2.11)	4 - 9	6.75 (1.29)
Knowledge about working clinically with autistic service users	0-8	3.89 (2.31)	1-9	5.55 (2.33)	2 – 8	6.00 (1.79)
Confidence working clinically with autistic service users	0-8	3.68 (2.23)	1-8	5.43 (2.38)	2 – 9	6.19 (2.10)
Competence working clinically with autistic service users	0-7	3.45 (2.12)	1-8	5.43 (2.48)	2 - 9	6.13 (2.03)

Table F2.
Participant ratings of current autism-related teaching.

	Depth N (%)		Breadth N (%)		Structure N (%)		Format N (%)	
	Trainee	**Staff**	**Trainee**	**Staff**	**Trainee**	**Staff**	**Trainee**	**Staff**
Missing	1 (2.3)	1 (26.3)	1 (2.3)	1 (6.3)	0 (0)	0	3 (6.8)	1 (6.3%)
1 – needs significant improvement	21 (47.7)	2 (12.5)	24 (54.5)	4 (25)	23 (52.3)	5 (31.3)	19 (43.2)	2 (12.5%)
2 – needs slight improvement	14 (31.8)	5 (31.83)	10 (22.7)	3 (18.8)	10 (22.7)	2 (12.5)	7 (15.9)	2 (12.5%)
3 – meets training needs	7 (15.9)	1 (6.3)	7 (15.9)	0	10 (22.7)	0	12 (27.3)	1 (6.3%)
4 – exceeds training needs	0 (0)	0	1 (2.3)	0	0	0	1 (2.3)	0
5 – outstanding	1 (2.3)	0	1 (2.3)	0	1 (2.3)	0	2 (4.5)	0
Unsure (staff only)		7 (43.8)		8 (50)		9 (56.3)		10 (62.5)

Table F3
Participant scores on autism knowledge questions.

	Trainees	**Staff**
	Correct (N (%))	**Correct (N (%))**
Q1	10 (26.3)	3 (30)
Q2	13 (34.2)	1 (10)
Q3	24 (63.2)	6 (60)
Q4	12 (31.6)	2 (20)
Q5	30 (78.9)	8 (80)
Q6	38 (100)	10 (100)
Q7	9 (23.7)	2 (20)
Q8	37 (96.4)	9 (90)
Q9	36 (94.7)	10 (100)

Appendix G: SIP – Thematic analysis results from survey data

Table G1.

Thematic analysis results from survey data.

Theme	Theme Description	Subthemes	Quote
Nothing about us without us	This theme captures perspectives about the importance of involving experts by experience in the design and delivery of teaching.	1.1.“Bringing teaching to life”. 1.2 Autistic Trainees 1.3. Representativeness of lived experience.	*“Would be great to incorporate service users into the teaching and to hear from those who are involved in supporting people with autism. It would also be interesting to add some consideration as to how psychologists who are neurodiverse themselves”*
Adults can be autistic too	This theme covers the perceived gaps and implications of the limited teaching in first year of training.	2.1. Autism across the lifespan. 2.2. Mismatch with placements. 2.3. One size does not fit all.	“*I don't think this should wait until second year when we learn about CAMHS and LD. This reinforces the idea that Autism is 'separate' / them versus us, and always treated as a main difficulty when in reality, people with autism are everywhere*”.

The Space Time Conundrum	This theme highlights the practical challenges faced fitting autism into the Doctorate in Clinical Psychology curriculum.	3.1. A balancing act. 3.2. Meaningful vs. tokenistic inclusion. * 3.3. Reluctance, rigidity, and resistance.	"*everyone always wants something extra"*
* "Conscious Incompetence"	This theme summarises trainees experience of knowing *why* autistic people need support, but not knowing *how* to implement support, including suggestions of how to address this within the curriculum.	* 4.1. Start with the basics. * 4.2. Tell me more – a call for in-depth learning. * 4.3. Psychologists' role in the diagnostic journey	*"We need to know how to adapt interventions to autism, how to recognise overlaps between autism and common presentations in adults."*
The EDI umbrella	This theme describes staff comments about incorporating autism across the curriculum under the Equality, Diversity, and Inclusion component of teaching.	± 5.1. Embedded as an area of difference.	*"There is a real danger that if you silo autism into specific teaching, that people make assumptions and*

	± 5.2. Broader neurodiversity perspective.	*stereotypes (as they can within EDI) that are unhelpful".*
	± 5.3. Person centred not autism specific.	

NB: *= theme/subtheme derived from trainee data only.

± = theme/subtheme derived from staff only data.

CAMHS = Child and Adolescent Mental Health Service; LD = Learning Disabilities; EDI = Equality, Diversity and Inclusion;

Appendix H:

Table H1.

Thematic analysis result from focus group data.

Theme	Theme Description	Subthemes	Quote
"It's a massive jigsaw"	This theme highlights perceived challenges of organising a curriculum.	1.1. Juggling competing demands. 1.2. Managing external presenters. 1.3. Trainee vs. training needs. 1.4. Lost in the marketing? 1.5. Meaningful integration.	"*the tension really is the fact that, in training, the number of issues to deliver grow, but there's none falling off the conveyor belt at the other end"*
The topic of autism is a "minefield"	This theme describes the perceived challenges specific to increasing the inclusion of autism as a topic in the curriculum.	2.1 Assuming best intentions. 2.2 Nuances beyond the pragmatics. 2.3 Layers of understanding.	*"you can very easily upset a trainee by treading on toes that you didn't know were there, and you had no intention of upsetting anybody".*

		2.4 Pressure to stay up to date.	
"It's not in my job description"	This theme depicts staff attitudes towards the role and responsibility of developing the curriculum.	3.1. The bigger picture 3.2. Capacity, responsibility, and workload. 3.3. Working together. 3.4. Little "p" vs. Big "p" politics	*"I think the fact that we bring so much diversity in with different lecturers means that it can be hard to hold together things like this, that kind of weave between lots of different lectures."*
Teaching reflecting clinical issues	This theme highlights the relationship between what is included within the curriculum and psychologists' role in clinical settings.	4.1. Clinical relevance. 4.2. Clinical responsibility. 4.3. Clinical skills.	*"there's a growing clinical picture and I think it's then staggering that our teaching doesn't reflect that."*
Diverse experience or part of diversity?	This theme considers autism in relation to other aspects of diversity and their inclusion within the curriculum and broader teaching spaces.	5.1. Parallels between autism and other diversities. 5.2. The value of lived experience. 5.3. Facilitating the inclusion of lived experience.	"*I'd love us to get to a point where we're not just teaching a specific model, but we're also kind of across the board consistently thinking about how this might apply it to different populations*"

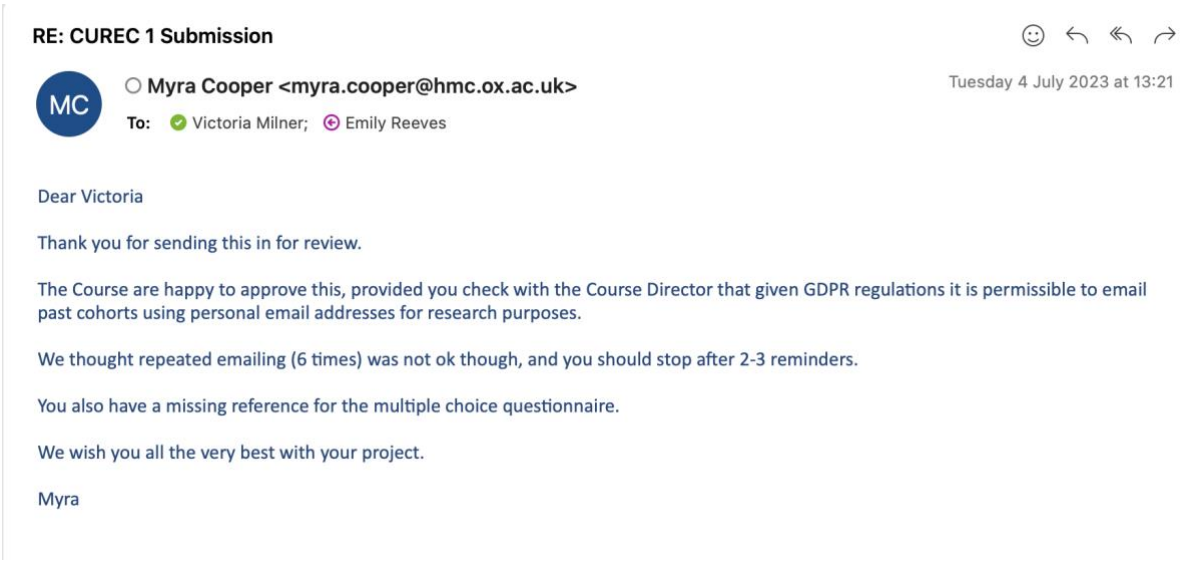
Appendix I: SIP - Feedback to Course Staff

The findings and recommendations were discussed with course staff in October 2024. The hybrid presentation was attended by three members of the academic staff team in person, and one online. The presentation and discussion were recorded with the attendees' consent and shared with further members of the academic team who were unavailable at the time of meeting.

Attendees expressed gratitude that the project had taken place and shared that the staff team had been considering neurodivergence whilst planning the upcoming teaching in the new academic year. They shared that a session regarding neurodiversity has been added to the year one curriculum for the upcoming cohort of trainees. This led to a discussion about how this links to the recommendations outlined from this project. For instance, whilst it is a benefit that there is information about neurodiversity in the first year of teaching, this broad overview of a topic would likely not focus on autistic people without a learning disability and how to support them.

The staff members acknowledged that there were many recommendations and that there was a need to prioritise the order in which they are implemented. One staff member stated the need for there to be a "lead" to follow through on these steps and monitor progress. Overall, to me (lead researcher) it felt like a positive meeting with scope to implement significant changes following the recommendations.

Appendix J: SIP – Ethical Approval from Research Director



RE: CUREC 1 Submission

MC

Myra Cooper <myra.cooper@hmc.ox.ac.uk>

Tuesday 4 July 2023 at 13:21

To: Victoria Milner; Emily Reeves

Dear Victoria

Thank you for sending this in for review.

The Course are happy to approve this, provided you check with the Course Director that given GDPR regulations it is permissible to email past cohorts using personal email addresses for research purposes.

We thought repeated emailing (6 times) was not ok though, and you should stop after 2-3 reminders.

You also have a missing reference for the multiple choice questionnaire.

We wish you all the very best with your project.

Myra

Appendix K: TDRP - Lay summary:

Autistic people may face barriers that raise the risk of becoming homeless. This can include social challenges, challenges with **planning and problem solving,** and sensory differences. Autistic people are also likely to need adjustments when accessing homelessness services.

We do not know if staff in homelessness services can recognise autism and offer support in the same way as they do for people with mental health problems. In this study we asked staff to read five descriptions of imagined service users:

- two descriptions of autism
- two descriptions of mental health difficulties
- a description of a service user without an autism or mental health condition .

We asked staff in homelessness services to say what condition the person may have, and what support they would give them . The study was done online.

Staff were most able to identify straightforward descriptions of autism. They were least likely to identify personality disorder. The study also suggests a need to improve the recognition of nuanced autism.

Appendix L: TDRP - Expression of Interest Survey (includes information sheet and consent form)

Start of Block: Default Question Block

Staff recognition of service user needs in homelessness services

CUREC Approval Reference: R90351/RE001

General Information

The aim of this research is to investigate the extent to which staff working in homelessness services are able to identify service users' needs, and what, if any, adaptations to support would be offered to address service user needs.

We appreciate your interest in participating in this online vignette-based study. You have been invited to participate as you are aged 18 years old and over, and work within a homelessness service in the UK in a face-to-face role with service users. Please read through this information before expressing an interest in taking part.

You may ask any questions before deciding to take part by contacting the researcher (details below).

The Principal Researcher is Dr Victoria Milner, who is attached to the Oxford Institute of Clinical Psychology Training and Research at the University of Oxford. This research is being completed under the supervision of Dr Alasdair Churchard and Dr Georgia Lockwood Estrin.

In this study, you will be asked to read five different vignettes that describe hypothetical service users. You will be asked about what needs this service user has, and what, if any, adaptations to support you would offer them. You will also be asked some demographic questions about you, any relevant training you have received, and your work experience. This should take about 20-30 minutes. No background knowledge is required.

Do I have to take part?

No. Please note that participation is voluntary. If you do decide to take part, you may withdraw at any point for any reason before submitting your answers by pressing the 'Exit' button/ closing the browser. However, we are only able to reimburse participants who complete all research activities. You will not be able to withdraw your data after you receive your reimbursement.

We have included a 'Prefer not to say' option where relevant, should you prefer not to answer a particular question.

Participants who complete the study will be sent a £10 voucher within two weeks of completion via the email address provided below. You will be asked to confirm receipt of the voucher.

How will my data be used?

We will ask for your work email address, place of work, and job role below if you express an interest in this study. This information is required to confirm that you work within a homelessness service.

Your email address will be used to create a unique survey link that will be sent directly to you. You will be assigned a unique ID code that will be linked to your data and email address, which will allow us to identify participants who complete the study for reimbursement purposes. Your survey responses will not be stored with your email address and data will be analysed anonymously. Your email address will only be used to send you the survey link and for reimbursement. Your email address will be deleted from our records when the study closes (approximately April 2024).

The data we will collect that could identify you will be your age, gender, ethnicity, job role, area in the UK.

Your IP address will not be stored. We will take all reasonable measures to ensure that data remain confidential.

The responses you provide will be stored in a password-protected electronic file on University of Oxford secure servers and may be used in a doctoral thesis, academic publications, conference presentations and presentations to relevant organisations. Research data will be stored for 3 years after publication or public release of the work of the research.

Who will have access to my data?

The University of Oxford is the data controller with respect to your personal data and, as such, will determine how your personal data is used in the research. The University will process your personal data for the purpose of the research outlined above. Research is a task that we perform in the public interest. Further information about your rights with respect to your personal data is available from https://compliance.admin.ox.ac.uk/individual-rights.

The data you provide may be shared with the principal researcher and supervisors only.

We would like to use the data in future studies, and to share data with other researchers (e.g. in online databases). Data will have identifying information removed before it is shared with other researchers or results are made public.

The results will be written up for an DClinPsych degree.

Who has reviewed this research?

This research has been reviewed by, and received ethics clearance through, a subcommittee of the University of Oxford Central University Research Ethics Committee [R90351/RE001].

---

*

If you are interested in taking part in this online study, please enter your **workplace email address** here and the researchers will be in touch:

_____

Please state the name of your employer/the company or organisation you work for:

_____

Please state your job role:

_____

Please confirm you are not a robot!

End of Block: Default Question Block

Appendix M: TDRP - Main data collection phase survey

Staff recognition of service users' needs in homelessness services. CUREC Approval

Reference: R90351/RE001

Please confirm you are not a robot!

Please note that you may only participate in this survey if you are 18 years of age or over.

- ○ I certify that I am 18 years or older

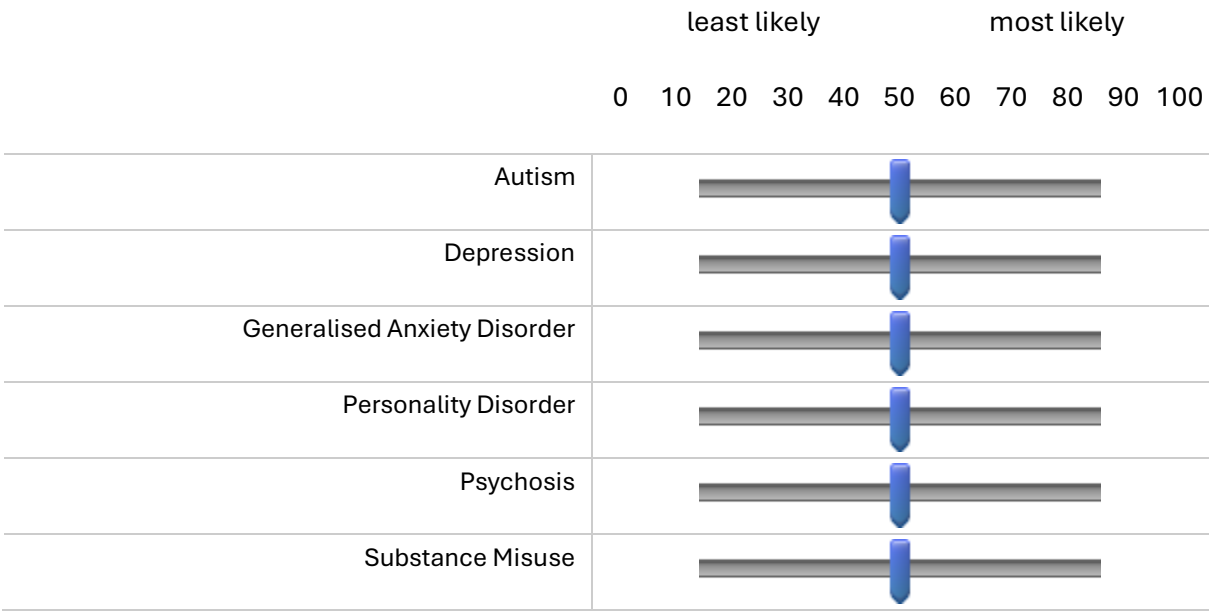
If you have read the information above and agree to participate with the understanding that the data (including any personal data) you submit will be processed accordingly, please tick the box below to start.

- ○ I consent to take part
- ○ I do not consent to take part

You will now be shown 5 vignettes. Please read each vignette carefully and then state the diagnosis (if any) you think this service user may have. Please only enter **one** diagnostic label, if you do not know or are not sure please state "not sure". If you think the service user has no psychological diagnosis, then please put "none".

You are working with Rayaan who is in their 30s and currently experiencing homelessness. You have received a referral from the local authority as their temporary accommodation arrangement has broken down and they are at risk of rough sleeping. Rayaan does not want to live in a group environment and is looking for self-contained accommodation. Rayaan became unemployed after making multiple complaints about co-workers not meeting Rayaan's expectations about reasonable behaviour (e.g., excessive noise, being late, not following workplace rules). This resulted in Rayaan not being able to afford their rent, and subsequent eviction. At their first appointment with the homelessness service, Rayaan stated a preference to have appointments at the same time and place each week. Your colleague commented that they noticed Rayaan rarely made eye contact and appeared anxious. Rayaan repeatedly shared their experience in rented accommodation. You have noticed that Rayaan is more animated when discussing their favourite sports team, but otherwise seems quite reserved and difficult to engage. Please state the diagnosis (if any) you think this service user may have. Please only enter one diagnostic label, if you do not know or are not sure please state "not sure". If you think the service user has no psychological diagnosis, then please put "none".

Based on the information in the vignette, how likely is it that this service user meets criteria for the following diagnoses [0 (%) = the least likely, 100(%) = the most likely to meet criteria]:



Would you make adaptations to the support provision you provide this service user?

- ○ Yes
- ○ No
- ○ Unsure

What adaptations to support would you consider for this service user?

_____

_____

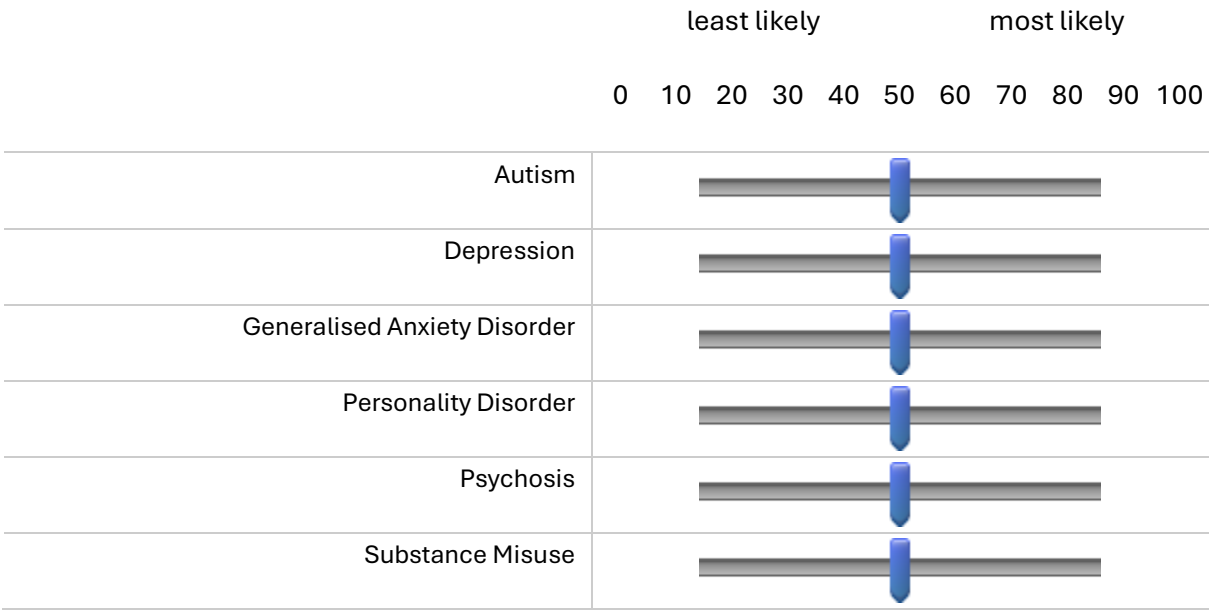
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You are working with Alex who is in their 30s and currently experiencing homelessness. You have received a referral from the local authority as their temporary accommodation arrangement has broken down and they are at risk of rough sleeping. Alex had a seemingly unprovoked incident when Alex was shouting, crying, and destroying furniture that resulted in them being given notice to leave the temporary accommodation. Prior to accessing support from the council, Alex struggled with their relationship with their manager at their previous job as they frequently misunderstood instructions, which led to unemployment, rent arrears and eviction. Prior to the first appointment with the homelessness service, Alex had read all the service's policies and procedures and brought an extensive document outlining their expectations for support in relation to these. Your colleague commented that they found Alex demanding and

pedantic, and their use of language was overly formal. You have noticed that Alex is more relaxed when meeting at the office as opposed to the local café which can be quite busy. Please state the diagnosis (if any) you think this service user may have. Please only enter one diagnostic label, if you do not know or are not sure please state "not sure". If you think the service user has no psychological diagnosis, then please put "none".

_____

Based on the information in the vignette, how likely is it that this service user meets criteria for the following diagnoses:



Would you make adaptations to the support provision you provide this service user?

- ○ Yes
- ○ No
- ○ Unsure

What adaptations to support would you consider for this service user?

_____

_____

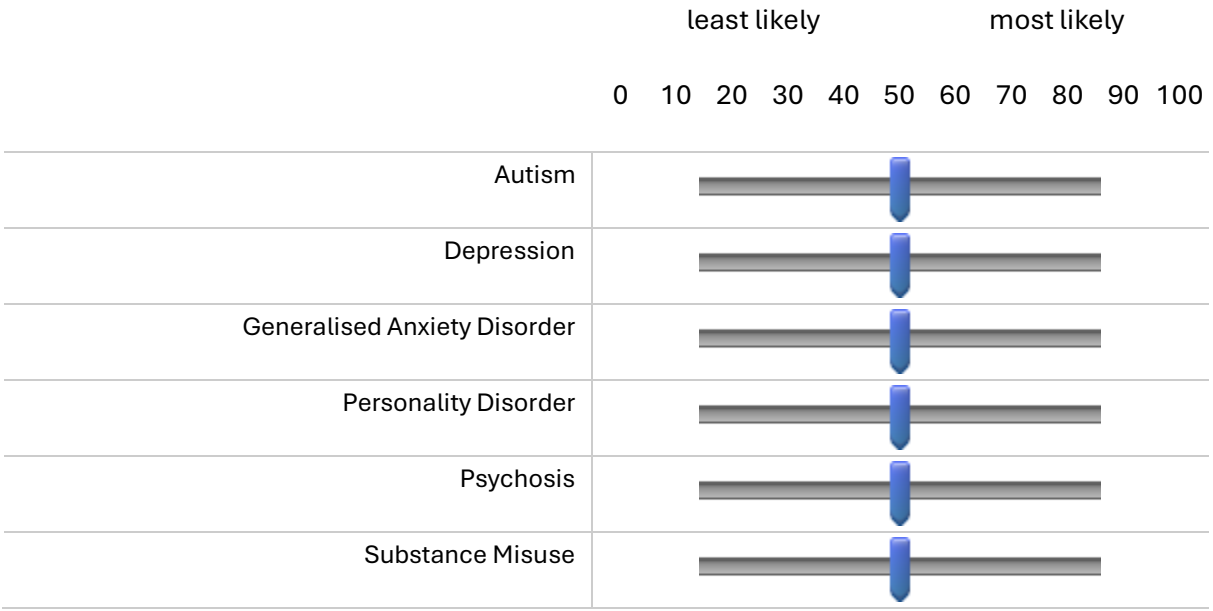
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You are working with Luka who is in their 30s and currently experiencing homelessness. You have received a referral from the local authority as their temporary accommodation arrangement has broken down and they are at risk of rough sleeping. Luka was told to leave their temporary accommodation as other residents complained about Luka pacing throughout the night, and shouting “leave me alone” when seemingly unprovoked. Luka lost their job as their manager became concerned about how

distracted Luka was. Other staff members also reported that Luka made false accusations that they were conspiring against them. This led to Luka being unable to pay his rent and eviction. When the service first made contact with Luka, they reported feeling fearful and appeared to find it difficult to grasp what the services were offering. Your colleague reported that Luka appeared confused, and they felt like they “weren’t getting anywhere with them”. Your colleague queried whether a risk assessment was needed due to Luka’s erratic behaviour. You have noticed that Luka has limited inhibition, for instance saying unkind comments about staff members’ appearances and laughing at inappropriate times. Please state the diagnosis (if any) you think this service user may have. Please only enter one diagnostic label, if you do not know or are not sure please state "not sure". If you think the service user has no psychological diagnosis, then please put "none".

_____

Based on the information in the vignette, how likely is it that this service user meets criteria for the following diagnoses:



Would you make adaptations to the support provision you provide this service user?

- ○ Yes
- ○ No
- ○ Unsure

What adaptations to support would you consider for this service user?

_____

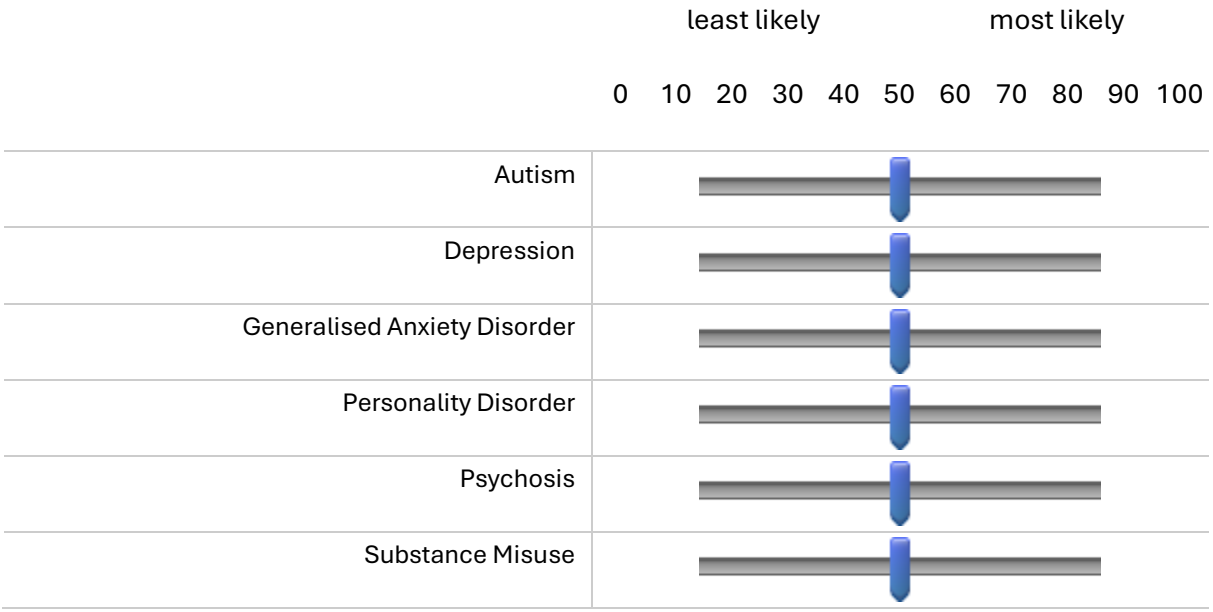
_____

_____

You are working with Rowan who is in their 30s and currently experiencing homelessness. You have received a referral from the local authority as their temporary accommodation arrangement has broken down and they are at risk of rough sleeping. Whilst in the temporary accommodation, Rowan commented that they struggled to get along with other people in the accommodation. They felt the others didn't like them and were taking advantage of them. At work, Rowan had become so close to their manager that they were seeing them most days, but after an argument Rowan refused to speak to them and consequently lost their job. Rowan found it difficult to manage their overwhelming feelings of shame and emptiness resulting in thoughts about harming themself and struggling to pay their rent. On first contact with the homelessness service, Rowan said that they felt worried and scared about being judged. They disclosed a history of adverse childhood events that they felt had contributed to their homelessness. Your colleague reported that Rowan was argumentative in their first meeting, and they felt Rowan overexaggerated the problems they experienced at the temporary accommodation. You have been working with Rowan for 6 weeks; Rowan has expressed a strong preference to work with you each week and has voiced concerns about possible changes in staff, feeling that they would not be able to cope without you. Please state the diagnosis (if any) you think this service user may have. Please only enter one diagnostic label, if you do not know or are not sure please state "not sure". If you think the service user has no psychological diagnosis, then please put "none".

_____

Based on the information in the vignette, how likely is it that this service user meets criteria for the following diagnoses:



Would you make adaptations to the support provision you provide this service user?

- ○ Yes
- ○ No
- ○ Unsure

What adaptations to support would you consider for this service user?

_____

_____

_____

You are working with Gurdeep who is in their 30s and currently experiencing homelessness. You have received a referral from the local authority as their temporary accommodation arrangement has broken down and they are at risk of rough sleeping. Gurdeep reported feeling unsafe at their temporary accommodation due to antisocial behaviour of other residents and has requested alternative provision. They were recently made redundant during the COVID-19 pandemic and was sofa surfing with friends whilst seeking a new job. However, the friends have asked Gurdeep to leave due to a change in personal circumstance. Gurdeep was nervous when reaching out to the homelessness service for the first time, as they did not know what support they would be offered and felt embarrassed that they had to ask for help. Your colleague described Gurdeep as quite low in mood due to their struggle to find new employment but motivated to engage with the service. You notice that Gurdeep engages well with the support offered and is open in discussions about their needs. Please state the diagnosis (if any) you think this service user may have. Please only enter one diagnostic label, if you do not know or are not sure please state "not sure". If you think the service user has no psychological diagnosis, then please put "none".

_____

Based on the information in the vignette, how likely is it that this service user meets criteria for the following diagnoses:

least likely most likely

0 10 20 30 40 50 60 70 80 90 100

Autism	
Depression	
Generalised Anxiety Disorder	
Personality Disorder	
Psychosis	
Substance Misuse	

Would you make adaptations to the support provision you provide this service user?

- ○ Yes
- ○ No
- ○ Unsure

What adaptations to support would you consider for this service user?

_____

_____

_____

The following questions are about your demographic information.

Please indicate your gender identity:

- ○ Male (including trans man)
- ○ Female (including trans woman)
- ○ Non-binary / gender fluid
- ○ Other gender not listed (please specify)

_____

- ○ Prefer not to say

Please enter your age in years:

_____

Please indicate your ethnicity:

- ○ Asian
- ○ Arab
- ○ Black African
- ○ Black Caribbean
- ○ Mixed/Multiple Ethnicities
- ○ White British
- ○ White Other
- ○ Other not listed (please specify)

_____

- ○ Prefer not to say

Please state the year you were born:

_____

What is your job title?

_____

What type of service do you work in?

- ○ Third Sector/Charitable
- ○ Government led/Local Authority
- ○ Other (please specify) _____

Which UK county do you work in?

_____

How many years have you worked in homelessness services? (please enter a whole number)

_____

This question is to help us reduce the chance of bots completing this survey! Please select the option "Somewhat agree".

- ○ Strongly disagree
- ○ Somewhat disagree
- ○ Neither agree nor disagree
- ○ Somewhat agree
- ○ Strongly agree

Do you have an autism diagnosis, or do you identify as being autistic?

- ○ Formal autism diagnosis
- ○ Self-identify as autistic (no formal diagnosis)
- ○ Not autistic
- ○ Prefer not to say

Do you have any other neurodivergent (e.g., ADHD, dyslexia) condition? If so, please specify:

- ☐ No
- ☐ Yes (formal diagnosis) _____
- ☐ Yes (self diagnosis) _____
- ☐ Prefer not to say

The following set of questions will ask about your experience of autism.

Do you know anyone who has an autism diagnosis in your own (personal) life? Please select all that apply:

- ☐ Close Family Member(s)
- ☐ Extended Family Member(s)
- ☐ Friend(s)
- ☐ Romantic Partner(s)
- ☐ Colleague(s)
- ☐ Other (please specify) _____
- ☐ Prefer not to say
- ☐ I do not know any autistic people in my own (personal) life

Have you worked with autistic service users?

- ○ Yes
- ○ No
- ○ Unsure

Please estimate how many autistic service users you have worked with (to the nearest 10 if necessary):

_____

Have you received any autism-specific training?

- ○ Yes
- ○ No

Please provide details (e.g. duration, context, content, when this took place) about the autism-specific training you completed. Example: "*a two-day training organised by the National Autistic Society about adaptations to CBT for autistic adults with anxiety in December 2019*"

_____

_____

_____

Do you have a diagnosis of psychosis?

- ○ Yes
- ○ No
- ○ Prefer not to say

Do you have a diagnosis of emotionally unstable personality disorder (EUPD) or borderline personality disorder (BPD)?

- ○ Yes
- ○ No
- ○ Prefer not to say

Do you have any other mental health diagnosis? If so, please specify:

- ☐ No
- ☐ Yes (formal diagnosis) _____
- ☐ Yes (self diagnosis) _____
- ☐ Prefer not to say

The following set of questions will ask about your experience of working with mental health difficulties.

Do you know anyone who has a diagnosis of **psychosis** in your own (personal) life? Please select all that apply:

- ☐ Close Family Member(s)
- ☐ Extended Family Member(s)
- ☐ Friend(s)
- ☐ Romantic Partner(s)
- ☐ Colleague(s)
- ☐ Other (please specify) _____
- ☐ Prefer not to say
- ☐ I do not know any people with psychosis in my own (personal) life

Do you know anyone who has a diagnosis of emotionally unstable personality disorder (EUPD) in your own (personal) life? Please select all that apply:

- ☐ Close Family Member(s)
- ☐ Extended Family Member(s)
- ☐ Friend(s)
- ☐ Romantic Partner(s)
- ☐ Colleague(s)
- ☐ Other (please specify) _____
- ☐ Prefer not to say
- ☐ I do not know any people with EUPD in my own (personal) life

Have you worked with service user(s) with psychosis?

- ○ Yes
- ○ No
- ○ Unsure

Please estimate how many service users with psychosis you have worked with (to the nearest 10 if necessary):

_____

Have you worked with service user(s) with Emotionally Unstable Personality Disorder (EUPD)?

- ○ Yes
- ○ No
- ○ Unsure

Please estimate how many service users with EUPD you have worked with (to the nearest 10 if necessary):

_____

Have you received any psychosis-specific training?

- ○ Yes
- ○ No

Please provide details (e.g. duration, context, content, when this took place) about the psychosis-specific training you completed. Example: "*a two-day training organised by MIND about adaptations for adults with psychosis experiencing homelessness in December 2019*"

_____

_____

_____

Have you received any Emotionally Unstable Personality Disorder (EUPD) -specific training?

- ○ Yes
- ○ No

Please provide details (e.g. duration, context, content, when this took place) about the EUPD-specific training you completed. Example: "*a two-day training organised by MIND about adaptations for adults with EUPD experiencing homelessness in December 2019*"

_____

_____

_____

Thank you for taking part in this survey. If you have any concerns about this survey, please do not hesitate to get in touch with the researcher, Dr Victoria Milner, victoria.milner@hmc.ox.ac.uk or her supervisor, Dr Alasdair Churchard, alasdair.churchard@hmc.ox.ac.uk.

Thank you for taking part and for helping with the development of these vignettes. If you have any further feedback or comments, please add it here. **If not, please ensure you click the bottom below to submit your response.**

_____

_____

_____

_____

Appendix N: TDRP - Debrief Email

Debrief document.

Thank you very much for taking part in the online study titled “Staff recognition of service users' needs in homelessness services” earlier this year.

At the start of the study, we informed you that we aimed to broadly look at the ability of staff working in homelessness services to identify needs and offer support.

The *specific* aim of this study was to investigate whether staff working in homelessness services were able to identify autism in service users. Additionally, we aimed to look at what adaptations to support would be made for autistic service users.

Participants were not informed of the specific aims of the study at the start of this online survey, to reduce bias within their answers. The debrief email was delayed to eliminate the likelihood of colleagues sharing the aims of the study with each other, which could have impacted the integrity of the research.

If you wish to withdraw your data from the study, please contact the researchers using the email address(es) below, quoting the unique ID code you were provided with when you signed up to the study, within two weeks of receiving this email. If you are unsure of your unique ID code, please use the same email address that you originally signed up to the study with to help the researchers identify you.

If you have any questions or concerns, please contact the researchers via email Victoria.milner@hmc.ox.ac.uk or Alasdair.churchard@hmc.ox.ac.uk and we will do our best to answer your query. We will acknowledge your concern within 10 working days and give you an indication of how it will be dealt with.

If you remain unhappy or wish to make a formal complaint, please contact the Chair of the Research Ethics Committee at the University of Oxford who will seek to resolve the matter as soon as possible: Medical Sciences Interdivisional Research Ethics Committee; Email: ethics@medsci.ox.ac.uk; Address: Research Services, University of Oxford, Boundary Brook House, Churchill Drive, Headington, Oxford OX3 7GB

We are very grateful for your time.

Very best wishes,
Dr Victoria Milner, on behalf of the authors.

Appendix O: TDRP Breakdown of participant spread across the UK.

Table O1
"Which UK county do you work in?"

	N=	%
South West	18	
South East	49	
Greater London	1	
East Midlands	12	
Anglia	12	
West Midlands	3	
Yorks/Humber	12	
North East	3	
North West	7	
Wales	8	
Scotland	1	
Northern Ireland	1	
Britain/UK	11	
England	61	
Missing	3	

Appendix P: British Journal of Clinical Psychology Submission Guidelines

1. SUBMISSION

Authors should kindly note that submission implies that the content has not been published or submitted for publication elsewhere except as a brief abstract in the proceedings of a scientific meeting or symposium.

New submissions should be made via the Research Exchange submission portal. You may check the status of your submission at any time by logging on to submission.wiley.com and clicking the "My Submissions" button. For technical help with the submission system, please review our FAQs or contact submissionhelp@wiley.com.

All papers published in the ***British Journal of Clinical Psychology*** are eligible for Panel A: Psychology, Psychiatry and Neuroscience in the Research Excellence Framework (REF).

Data protection:

By submitting a manuscript to or reviewing for this publication, your name, email address, and affiliation, and other contact details the publication might require, will be used for the regular operations of the publication, including, when necessary, sharing with the publisher (Wiley) and partners for production and publication. The publication and the publisher recognize the importance of protecting the personal information collected from users in the operation of these services, and have practices in place to ensure that steps are taken to maintain the security, integrity, and privacy of the personal data collected and processed. You can learn more at https://authorservices.wiley.com/statements/data-protection-policy.html.

Preprint policy:

This journal will consider for review articles previously available as preprints. Authors may also post the submitted version of a manuscript to a preprint server at any time. Authors are requested to update any pre-publication versions with a link to the final published article.

2. AIMS AND SCOPE

The ***British Journal of Clinical Psychology*** publishes original research, both empirical and theoretical, on all aspects of clinical psychology:

clinical and abnormal psychology featuring descriptive or experimental studies

aetiology, assessment and treatment of the whole range of psychological disorders irrespective of age group and setting

biological influences on individual behaviour

studies of psychological interventions and treatment on individuals, dyads, families and groups

For specific submission requirements, read the Author Guidelines.

The Journal is catholic with respect to the range of theories and methods used to answer substantive scientific problems. Studies of samples with no current psychological disorder will only be considered if they have a direct bearing on clinical theory or practice.

The following types of paper are invited:

papers reporting original empirical investigations;

theoretical papers, provided that these are sufficiently related to empirical data;

review articles, which need not be exhaustive, but which should give an interpretation of the state of research in a given field and, where appropriate, identify its clinical implications;

Brief Reports and Comments.

3. MANUSCRIPT CATEGORIES AND REQUIREMENTS

Papers describing quantitative research should be no more than 5000 words (excluding the abstract, reference list, tables and figures). Papers describing qualitative research (including reviews with qualitative analyses) should be no more than 6000 words (including quotes, whether in the text or in tables, but excluding the abstract, tables, figures and references). Brief reports should not exceed 2000 words and should have no more than one table or figure. Any papers that are over this word limit will be returned to the authors. Appendices are included in the word limit; however online appendices are not included.

In exceptional cases the Editor retains discretion to publish papers beyond this length where the clear and concise expression of the scientific content requires greater length (e.g., explanation of a new theory or a substantially new method). Authors must contact the Editor prior to submission in such a case.

Refer to the separate guidelines for Registered Reports.

All systematic reviews must be pre-registered and an anonymous link to the pre-registration must be provided in the main document, so that it is available to reviewers. Systematic reviews without pre-registration details will be returned to the authors at submission.

4. PREPARING THE SUBMISSION

Free Format Submission

British Journal of Clinical Psychology now offers free format submission for a simplified and streamlined submission process.

Before you submit, you will need:

Your manuscript: this can be a single file including text, figures, and tables, or separate files – whichever you prefer (If you do submit separate files, we encourage you to also include your figures within the main document to make it easier for editors and reviewers to read your manuscript, but this is not compulsory). All required sections should be contained in your manuscript, including abstract, introduction, methods, results, and conclusions. Figures and tables should have legends. References may be submitted in any style or format, as long as it is consistent throughout the manuscript. If the manuscript, figures or tables are difficult for you to read, they will also be difficult for the editors and reviewers. If your manuscript is difficult to read, the editorial office may send it back to you for revision.

The title page of the manuscript, including a data availability statement and your co-author details with affiliations. ***(Why is this important? We need to keep all co-authors informed of the outcome of the peer review process.)*** You may like to use this template for your title page.

Important: the journal operates a double-anonymous peer review policy. Anonymise your manuscript and prepare a separate title page containing author details. ***(Why is this important? We need to uphold rigorous ethical standards for the research we consider for publication.)***

An ORCID ID, freely available at https://orcid.org. ***(Why is this important? Your article, if accepted and published, will be attached to your ORCID profile. Institutions and funders are increasingly requiring authors to have ORCID IDs.)***

To submit, login at https://wiley.atyponrex.com/journal/BJC and create a new submission. Follow the submission steps as required and submit the manuscript.

If you are invited to revise your manuscript after peer review, the journal will also request the revised manuscript to be formatted according to journal requirements as described below.

Revised Manuscript Submission

Contributions must be typed in double spacing. All sheets must be numbered.

Cover letters are not mandatory; however, they may be supplied at the author's discretion.

Parts of the Manuscript

The manuscript should be submitted in separate files: title page; main text file; figures/tables; supporting information.

Title Page

You may like to use this template for your title page. The title page should contain**:**

A short informative title containing the major key words. The title should not contain abbreviations (see Wiley's best practice SEO tips);

A short running title of less than 40 characters;

The full names of the authors;

The author's institutional affiliations where the work was conducted, with a footnote for the author's present address if different from where the work was conducted;

Abstract;

Keywords

Data availability statement (see Data Sharing and Data Accessibility Policy);

Acknowledgments.

Author Contributions

For all articles, the journal mandates the CRediT (Contribution Roles Taxonomy)—more information is available on our Author Services site.

Abstract

Please provide a structured abstract under the headings: Objectives, Methods, Results, Conclusions. For Articles, the abstract should not exceed 250 words. For Brief Reports, abstracts should not exceed 120 words.

Articles which report original scientific research should also include a heading 'Design' before 'Methods'.

The 'Methods' section for systematic reviews and theoretical papers should include, as a minimum, a description of the methods the author(s) used to access the literature they drew upon. That is, the abstract should summarize the databases that were consulted and the search terms that were used.

Keywords

Provide appropriate keywords.

Acknowledgments

Contributions from anyone who does not meet the criteria for authorship should be listed, with permission from the contributor, in an Acknowledgments section. Financial and material support should also be mentioned. Thanks to anonymous reviewers are not appropriate.

Practitioner Points

All articles must include Practitioner Points – these are 2-4 bullet points, following the abstract, with the heading 'Practitioner Points'. These should briefly and clearly outline the relevance of your research to professional practice.

Main Text File

As papers are double-anonymous peer reviewed, the main text file should not include any information that might identify the authors.

Manuscripts can be uploaded either as a single document (containing the main text, tables and figures), or with figures and tables provided as separate files. Should your manuscript reach revision stage, figures and tables must be provided as separate files. The main manuscript file can be submitted in Microsoft Word (.doc or .docx) or LaTex (.tex) format.

If submitting your manuscript file in LaTex format via Research Exchange, select the file designation "Main Document – LaTeX .tex File" on upload. When submitting a LaTex Main Document, you must also provide a PDF version of the manuscript for Peer Review. Please upload this file as "Main Document - LaTeX PDF." All supporting files that are referred to in the LaTex Main Document should be uploaded as a "LaTeX Supplementary File."

LaTex Guidelines for Post-Acceptance:

Please check that you have supplied the following files for typesetting post-acceptance:

PDF of the finalized source manuscript files compiled without any errors.

The LaTeX source code files (text, figure captions, and tables, preferably in a single file), BibTex files (if used), any associated packages/files along with all other files needed for compiling without any errors. This is particularly important if authors have used any LaTeX style or class files, bibliography files (.bbl, .bst. .blg) or packages apart from those used in the NJD LaTex Template class file.

Electronic graphics files for the illustrations in Encapsulated PostScript (EPS), PDF or TIFF format. Authors are requested not to create figures using LaTeX codes.

Your main document file should include:

A short informative title containing the major key words. The title should not contain abbreviations;

Abstract structured (objectives/methods/results/conclusions);

Up to seven keywords;

Practitioner Points: Authors will need to provide no more than 2-4 bullet points, written with the practitioner in mind, that summarize the key messages of their paper to be published with their article;

Main body: formatted as introduction, materials & methods, results, discussion, conclusion;

References;

Tables (each table complete with title and footnotes);

Figure legends: Legends should be supplied as a complete list in the text. Figures should be uploaded as separate files (see below).

Supporting information should be supplied as separate files. Tables and figures can be included at the end of the main document or attached as separate files but they must be mentioned in the text.

As papers are double-anonymous peer reviewed, the main text file should not include any information that might identify the authors. Do not mention the authors' names or affiliations and always refer to any previous work in the third person.

The journal uses British/US spelling; however, authors may submit using either option, as spelling of accepted papers is converted during the production process.

References
This journal uses APA reference style; as the journal offers Free Format submission, however, this is for information only and you do not need to format the references in your article. This will instead be taken care of by the typesetter.

Tables
Tables should be self-contained and complement, not duplicate, information contained in the text. They should be supplied as editable files, not pasted as images. Legends should be concise but comprehensive – the table, legend, and footnotes must be understandable without reference to the text. All abbreviations must be defined in footnotes. Footnote symbols: †, ‡, §, ¶, should be used (in that order) and *, **, *** should be reserved for P-values. Statistical measures such as SD or SEM should be identified in the headings.
Figures
Although authors are encouraged to send the highest-quality figures possible, for peer-review purposes, a wide variety of formats, sizes, and resolutions are accepted.
Click here for the basic figure requirements for figures submitted with manuscripts for initial peer review, as well as the more detailed post-acceptance figure requirements.
Legends should be concise but comprehensive – the figure and its legend must be understandable without reference to the text. Include definitions of any symbols used and define/explain all abbreviations and units of measurement.
Supporting Information
Supporting information is information that is not essential to the article, but provides greater depth and background. It is hosted online and appears without editing or typesetting. It may include tables, figures, videos, datasets, etc.
Wiley's FAQs on supporting information.
Note: if data, scripts, or other artefacts used to generate the analyses presented in the paper are available via a publicly available data repository, authors should include a reference to the location of the material within their paper.

General Style Points

For guidelines on editorial style, please consult the APA Publication Manual published by the American Psychological Association. The following points provide general advice on formatting and style.
Language: Authors must avoid the use of sexist or any other discriminatory language.
Abbreviations: In general, terms should not be abbreviated unless they are used repeatedly and the abbreviation is helpful to the reader. Initially, use the word in full, followed by the abbreviation in parentheses. Thereafter use the abbreviation only.
Units of measurement: Measurements should be given in SI or SI-derived units. Visit the Bureau International des Poids et Mesures (BIPM) website for more information about SI units.
Effect size: In normal circumstances, effect size should be incorporated.
Numbers: numbers under 10 are spelt out, except for: measurements with a unit (8mmol/l); age (6 weeks old), or lists with other numbers (11 dogs, 9 cats, 4 gerbils).
Wiley Author Resources
Manuscript Preparation Tips: Wiley has a range of resources for authors preparing manuscripts for submission available here. In particular, we encourage authors to consult Wiley's best practice tips on Writing for Search Engine Optimization.
Article Preparation Support: Wiley Editing Services offers expert help with English Language Editing, as well as translation, manuscript formatting, figure illustration, figure formatting, and graphical abstract design – so you can submit your manuscript with confidence.
Also, check out our resources for Preparing Your Article for general guidance and the BPS Publish with Impact infographic for advice on optimizing your article for search engines.

ECR Best Paper Award

The BPS Early Career Researcher Best Paper Award is open to researchers and practitioners who completed their highest degree no more than five years ago. Please read full terms and criteria before applying. Those who wish to apply can opt-in to the question when submitting their manuscript for peer review.

5. EDITORIAL POLICIES AND ETHICAL CONSIDERATIONS

Peer Review and Acceptance

Except where otherwise stated, the journal operates a policy of anonymous (double-anonymous) peer review. Please ensure that any information which may reveal author identity is anonymized in your submission, such as institutional affiliations, geographical location or references to unpublished research. We also operate a triage process in which submissions that are out of scope or otherwise inappropriate will be rejected by the editors without external peer review. Before submitting, read the terms and conditions of submission and the declaration of competing interests.

We aim to provide authors with a first decision within 90 days of submission.

Further information about the process of peer review and production can be found in 'What happens to my paper?' Read Wiley's policy on the confidentiality of the review process.

Appeals Procedure

Authors may appeal an editorial decision if they feel that the decision to reject was based on either a significant misunderstanding of a core aspect of the manuscript, a failure to understand how the manuscript advances the literature or concerns regarding the manuscript-handling process. Differences in opinion regarding the novelty or significance of the reported findings are not considered as grounds for appeal.

To raise an appeal against an editorial decision, please contact the Editor who made the decision in the first instance using the journal inbox, quoting your manuscript ID number and explaining your rationale for the appeal. Appeals are handled according to the procedure recommended by COPE. If you are not satisfied with the Editor(s) response, you can appeal further by writing to the BPS Knowledge & Insight Team by email at Academic.Publications@bps.org.uk. Appeals must be received within two calendar months of the date of the letter from the Editor communicating the decision. The BPS Knowledge and Insight Team's decision following an appeal consideration is final.

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The journal requires that clinical trials are prospectively registered in a publicly accessible database and clinical trial registration numbers should be included in all papers that report their results. Authors are asked to include the name of the trial register and the clinical trial registration number at the end of the abstract. If the trial is not registered, or was registered retrospectively, the reasons for this should be explained.

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Accurate and complete reporting enables readers to fully appraise research, replicate it, and use it. Authors are encouraged to adhere to recognised research reporting standards.

We also encourage authors to refer to and follow guidelines from:

Future of Research Communications and e-Scholarship (FORCE11)

The Gold Standard Publication Checklist from Hooijmans and colleagues

FAIRsharing website

Conflict of Interest

The journal requires that all authors disclose any potential sources of conflict of interest. Any interest or relationship, financial or otherwise that might be perceived as influencing an author's objectivity is considered a potential source of conflict of interest. These must be disclosed when directly relevant or directly related to the work that the authors describe in their manuscript. Potential sources of conflict of interest include, but are not limited to: patent or stock ownership, membership of a company board of directors, membership of an advisory board or committee for a company, and consultancy for or receipt of speaker's fees from a company. The existence of a conflict of interest does not preclude publication. If the authors have no conflict of interest to declare, they must also state this at submission. It is the responsibility of the corresponding author to review this policy with all authors and collectively to disclose with the submission ALL pertinent commercial and other relationships.

Funding

Authors should list all funding sources in the Acknowledgments section. Authors are responsible for the accuracy of their funder designation. If in doubt, please check the Open Funder Registry for the correct nomenclature: https://www.crossref.org/services/funder-registry/

Authorship

All listed authors should have contributed to the manuscript substantially and have agreed to the final submitted version. Authorship is defined by the criteria set out in the APA Publication Manual:

"Individuals should only take authorship credit for work they have actually performed or to which they have substantially contributed (APA Ethics Code Standard 8.12a, Publication Credit). Authorship encompasses, therefore, not only those who do the actual writing but also those who have made substantial scientific contributions to a study. Substantial professional contributions may include formulating the problem or hypothesis, structuring the experimental design, organizing and conducting the statistical analysis, interpreting the results, or writing a major portion of the paper. Those who so contribute are listed in the byline." (p.18)

Data Sharing and Data Accessibility Policy

The ***British Journal of Clinical Psychology*** recognizes the many benefits of archiving data for scientific progress. Archived data provides an indispensable resource for the scientific community, making possible future replications and secondary analyses, in addition to the importance of verifying the dependability of published research findings.

The journal expects that where possible all data supporting the results in papers published are archived in an appropriate public archive offering open access and guaranteed preservation. The archived data must allow each result in the published paper to be recreated and the analyses reported in the paper to be replicated in full to support the conclusions made. Authors are welcome to archive more than this, but not less.

All papers need to be supported by a data archiving statement and the data set must be cited in the Methods section. The paper must include a link to the repository in order that the statement can be published.

It is not necessary to make data publicly available at the point of submission, but an active link must be included in the final accepted manuscript. For authors who have pre-registered studies, please use the Registered Report link in the Author Guidelines.

In some cases, despite the authors' best efforts, some or all data or materials cannot be shared for legal or ethical reasons, including issues of author consent, third party rights, institutional or national regulations or laws, or the nature of data gathered. In such cases, authors must inform the editors at the time of submission. It is understood that in some cases access will be provided under restrictions to protect confidential or proprietary information. Editors may grant exceptions to data access requirements provided authors explain the restrictions on the data set and how they preclude public access, and, if possible, describe the steps others should follow to gain access to the data.

If the authors cannot or do not intend to make the data publicly available, a statement to this effect, along with the reasons that the data is not shared, must be included in the manuscript.

Finally, if submitting authors have any questions about the data sharing policy, access the FAQs for additional detail.

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Wiley believes that no valuable research should go unshared. This journal participates in Wiley's Refer & Transfer program. If your manuscript is not accepted, you may receive a recommendation to transfer your manuscript to another suitable Wiley journal, either through a referral from the journal's editor or through our Transfer Desk Assistant.

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Recognizing the importance of research transparency and data sharing to cumulative research, ***British Journal of Clinical Psychology*** encourages the following Open Research practices.

Sharing of data, materials, research instruments and their accessibility. British Journal of Clinical Psychology encourages authors to share the data, materials, research instruments, and other artifacts supporting the results in their study by archiving them in an appropriate public repository. Qualifying public, open-access repositories are committed to preserving data, materials, and/or registered analysis plans and keeping them publicly accessible via the web into perpetuity. Examples include the Open Science Framework (OSF) and the various Dataverse networks. Hundreds of other qualifying data/materials repositories are listed at the Registry of Research Data Repositories (http://www.re3data.org). Personal websites and most departmental websites do not qualify as repositories.

Publication Ethics

Authors are reminded that the ***British Journal of Clinical Psychology*** adheres to the ethics of scientific publication as detailed in the ***Ethical principles of psychologists and code of conduct*** (American Psychological Association, 2010). The Journal generally conforms to the Uniform Requirements for Manuscripts of the International Committee of Medical Journal Editors (ICJME) and is also a member and subscribes to the principles of the Committee on Publication Ethics (COPE). Authors must ensure that all research meets these ethical guidelines and affirm that the research has received permission from a stated Research Ethics Committee (REC) or Institutional Review Board (IRB), including adherence to the legal requirements of the study county.

Note this journal uses iThenticate's CrossCheck software to detect instances of overlapping and similar text in submitted manuscripts. Read Wiley's Top 10 Publishing Ethics Tips for Authors. Read Wiley's Publication Ethics Guidelines can be found.

ORCID

As part of the journal's commitment to supporting authors at every step of the publishing process, the journal requires the submitting author (only) to provide an ORCID iD when submitting a manuscript. This takes around 2 minutes to complete. Find more information here.

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WALS + standard CTA/ELA and/or Open Access for hybrid titles

You may choose to publish under the terms of the journal's standard copyright agreement, or Open Access under the terms of a Creative Commons License.

Standard re-use and licensing rights vary by journal. Note that certain funders mandate a particular type of CC license be used. This journal uses the CC-BY/CC-BY-NC/CC-BY-NC-ND Creative Commons License.

Self-Archiving Definitions and Policies: Note that the journal's standard copyright agreement allows for self-archiving of different versions of the article under specific conditions.

BPS members and open access: if the corresponding author of an accepted article is a Graduate or Chartered member of the BPS, the Society will cover will cover 100% of the APC allowing the article to be published as open access and freely available.

7. PUBLICATION PROCESS AFTER ACCEPTANCE

Accepted Article Received in Production

When an accepted article is received by Wiley's production team, the corresponding author will receive an email asking them to login or register with Wiley Author Services. The author will be asked to sign a publication license at this point.

Proofs

Once the paper is typeset, the author will receive an email notification with full instructions on how to provide proof corrections.

Please note that the author is responsible for all statements made in their work, including changes made during the editorial process – authors should check proofs carefully. Note that proofs should be returned within 48 hours from receipt of first proof.

Early View

The journal offers rapid publication via Wiley's Early View service. Early View (Online Version of Record) articles are published on Wiley Online Library before inclusion in an issue. Before we can publish an article, we require a signed license (authors should login or register with Wiley Author Services). Once the article is published on Early View, no further changes to the article are possible. The Early View article is fully citable and carries an online publication date and DOI for citations.

8. POST PUBLICATION

Access and Sharing

When the article is published online:

The author receives an email alert (if requested).

The link to the published article can be shared through social media.

The author will have free access to the paper (after accepting the Terms & Conditions of use, they can view the article).

For non-open access articles, the corresponding author and co-authors can nominate up to ten colleagues to receive a publication alert and free online access to the article.

Promoting the Article

To find out how to best promote an article, click here.

Wiley Editing Services offers professional video, design, and writing services to create shareable video abstracts, infographics, conference posters, lay summaries, and research news stories for your research – so you can help your research get the attention it deserves.

Measuring the Impact of an Article

Wiley also helps authors measure the impact of their research through specialist partnerships with Kudos and Altmetric.

9. EDITORIAL OFFICE CONTACT DETAILS

For help with submissions, please contact the Editorial Assistant at bjc@wiley.com.

Appendix Q: Journal of Obsessive – Compulsive and Related Disorders Submission Guidelines

About the journal

Aims and scope

Journal of Obsessive-Compulsive and Related Disorders (JOCRD) is an international journal that publishes high quality research and clinically-oriented articles dealing with all aspects of **obsessive-compulsive disorder** (OCD) and related conditions (**OC spectrum disorders**; e.g., **trichotillomania**, **hoarding**, **body dysmorphic disorder**). The journal invites studies of clinical and non-clinical (i.e., student) samples of all age groups from the fields of psychiatry, psychology, neuroscience, and other medical and health sciences. The journal's broad focus encompasses **classification**, **assessment**, **psychological** and **psychiatric treatment**, **prevention**, **psychopathology**, **neurobiology** and **genetics**. Clinical reports (descriptions of innovative treatment methods) and book reviews on all aspects of OCD-related disorders will be considered, as will theoretical and review articles that make valuable contributions.

Suitable topics for manuscripts include:

The boundaries of OCD and relationships with OC spectrum disorders

Validation of assessments of obsessive-compulsive and related phenomena

OCD symptoms in diverse social and cultural contexts

Studies of neurobiological and genetic factors in OCD and related conditions

Experimental and descriptive psychopathology and epidemiological studies

Studies on relationships among cognitive and behavioral variables in OCD and related disorders

Interpersonal aspects of OCD and related disorders

Evaluation of psychological and psychiatric treatment and prevention programs, and predictors of outcome.

Article types

Research paper:

Clinical and non-clinical research dealing with all aspects of obsessive-compulsive disorder (OCD) and related conditions (OC spectrum disorders; e.g., trichotillomania, hoarding, body dysmorphic disorder)

Review:

The journal welcomes systematic reviews and meta-analysis that make valuable contributions on all aspects of OCD-related disorders.

Viewpoint:

These are concise discussion papers on important topics in obsessive-compulsive and related disorders. For example, they may include new research developments, emerging innovations, critical challenges, and debates in the field. They are a platform for author(s) perspective with the aim to generate discourse on important issues. Viewpoint articles are by invitation only. Potential authors who wish to be considered may email the Editor for approval (cougle@psy.fsu.edu)

Viewpoints should have a maximum 1,000 words (not including references), no more than 10 references, up to 1 figure or table and no abstract.

Short communication:

A condensed paper with a brief scientific message. This option is designed to allow publication of research reports that are not suitable for publication as regular articles. Shorter

Communications or Brief Reports are appropriate for articles with a specialized focus or of particular didactic value. Manuscripts should be between 3000-5000 words, and must not exceed the upper word limit. This limit includes the abstract, text, and references, but not the title page, tables and figures.

Correspondence:

Letters in response to papers published in journal.

Brief Review:

These are concise review articles on new and emerging topics, summarizing current information and advances in the field. The review should be approximately 2000 words (not including references or reference notes), with up to 50 references.

Peer review

This journal follows a double anonymized review process. Your submission will initially be assessed by our editors to determine suitability for publication in this journal. If your submission is deemed suitable, it will typically be sent to a minimum of one reviewer for an independent expert assessment of the scientific quality. The decision as to whether your article is accepted or rejected will be taken by our editors.

Read more about peer review.
Our editors are not involved in making decisions about papers which:
they have written themselves.
have been written by family members or colleagues.
relate to products or services in which they have an interest.
Any such submissions will be subject to the journal's usual procedures and peer review will be handled independently of the editor involved and their research group. Read more about editor duties.

Authors may submit a formal appeal request to the editorial decision, provided the it meets the requirements and follows the procedure outlined in Elsevier's Appeal Policy. Only one appeal per submission will be considered and the appeal decision will be final.

Special issues and article collections

The peer review process for special issues and article collections follows the same process as outlined above for regular submissions, except, a guest editor may send the submissions out to the reviewers and may recommend a decision to the journal editor. The journal editor oversees the peer review process of all special issues and article collections to ensure the high standards of publishing ethics and responsiveness are respected and is responsible for the final decision regarding acceptance or rejection of articles.

Open access

We refer you to our open access information page to learn about open access options for this journal.
Ethics and policies

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Authors must follow ethical guidelines stated in Elsevier's Publishing Ethics Policy.

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When authors submit an article to an Elsevier journal it is implied that:
the work described has not been published previously except in the form of a preprint, an abstract, a published lecture, academic thesis or registered report. See our policy on multiple, redundant or concurrent publication.
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Mettam, G. R., & Adams, L. B. (2020). How to prepare an electronic version of your article. In B. S. Jones, & R. Z. Smith (Eds.), *Introduction to the electronic age* (pp. 281–304). E-Publishing Inc.
Reference to a website:
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