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The thesis I am submitting is entirely my own work except where otherwise indicated.

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What are the Rates of Social Anxiety and Eating Disorders in Children and Adolescents, and What are the Patterns of Comorbidity Between These Conditions as Reported in the Existing Literature?

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Theory Driven Research Project (TDRP) **5435 words**

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ABSTRACTS

SRL

Social anxiety disorder (SAD) is one of the most common co-morbidities in eating disorders (EDs). Both SAD and ED commonly first present during adolescence. The current systematic review aims to provide an overview of the present literature regarding rates and understanding of the co-occurring presentation of social anxiety (SA) in ED in young people. A narrative review was conducted by systematically searching for relevant papers across CINAHL, Embase, MEDLINE, PsycINFO and Scopus. 17 studies of medium to high quality were included in total. Findings from the review further demonstrated the link between SA and ED in young people, with SA symptoms more commonly observed in ED populations than in healthy control (HC) groups in this cohort. Clinical implications are explored, and we conclude that further research is needed to better understand underlying vulnerability factors and mechanisms between these two presentations.

Keywords: Eating disorders, social anxiety, systematic review, adolescence, young people

SIP

Objective: Parents of children with cleft lip and/or palate (CL/P) can often find the period surrounding primary repair surgery challenging. This study explored the experiences and psychological needs of parents of children undergoing their first repair surgery to inform service improvement recommendations.

Design: An audit of patient files was conducted to review psychology service provision to children who underwent their primary repair surgery in 2023. Semi-structured interviews with 10 families whose children underwent surgery in 2023 were analysed using thematic analysis.

Setting: Specialist cleft service.

Participants: Parents of children who had their primary surgery in 2023.

Results: Findings, reviewed in consultation with staff, identified three key themes: *accessing support at Spires*, *coping* and *emotional support needs*.

Conclusions: These findings informed recommendations to enhance psychological support within the team. Implementation and evaluation of these recommendations should be monitored.

Keywords: Cleft, primary repair surgery, parental preparedness, psychological preparedness

Autistic people often face barriers to accessing mental health support despite mental health disorders being more prevalent in this population. The current study aimed to evaluate whether clinicians' judgements of a patient presenting with anxiety were influenced by suggested autistic traits. An experimental design was utilised to investigate mental health professionals' clinical expectations of a patient being assessed for treatment of an anxiety disorder, relative to no information and two levels of descriptive information indicative of autism. 106 clinicians watched a vignette of a woman attending for initial CBT assessment of anxiety and then responded to measures related to expectations, engagement, optimism and pessimism of ongoing treatment. Clinicians were allocated to one of three conditions providing different levels of suggestion of autism, from no mention of autism to a suggestion that assessment might be beneficial. No differences were found between conditions suggesting the autism label did not significantly influence clinicians' perceptions of the individual or their expectations for treatment. Results indicated that clinicians reported observing more optimistic than pessimistic signs informing expectations for therapy across conditions. The findings align with previous research related to perceptions of an autism label in the general population. Limitations of the study include use of actors in the vignette, the use of unvalidated measures and that the present study was limited to clinicians residing in the UK. Clinical implications and directions for future research are discussed.

Keywords: *autism, anxiety, clinicians' judgements, diagnosis, labelling*

Systematic Review of the Literature

What are the Rates of Social Anxiety and Eating Disorders in Children and Adolescents, and What are the Patterns of Comorbidity Between These Conditions as Reported in the Existing Literature?

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Proposed Journal: This report is intended for submission for *Clinical Psychology Review* and has been prepared in accordance with their guidelines (Appendix A). This journal focuses on high quality reviews in clinical psychology and has published similar studies previously.

Abstract

Social anxiety disorder (SAD) is one of the most common co-morbidities in eating disorders (EDs). Both SAD and ED commonly first present during adolescence. The current systematic review aims to provide an overview of the present literature regarding rates and understanding of the co-occurring presentation of social anxiety (SA) symptoms in ED in young people. A narrative review was conducted by systematically searching for relevant papers across CINAHL, Embase, MEDLINE, PsycINFO and Scopus. 17 studies of medium to high quality were included in total. Findings from the review further demonstrated the link between SA and ED in young people, with SA symptoms more commonly observed in ED populations than in healthy control (HC) groups in this cohort. Clinical implications are explored, and we conclude that further research is needed to better understand underlying vulnerability factors and mechanisms between these two presentations.

Keywords: *Eating disorders, social anxiety, systematic review, adolescence, young people*

Introduction

Eating disorders (EDs) are serious psychiatric conditions marked by altered eating behaviours, which can result in significant weight loss, severely low body weight or to weight gain and obesity (Treasure et al., 2022). Individuals with EDs can also be preoccupied with food, body weight and shape (National Institute of Mental Health, 2025). The most commonly studied ED diagnoses include Anorexia Nervosa (AN), Binge Eating Disorder (BED), Bulimia Nervosa (BN) and other specified feeding and eating disorders (OSFED), (Solmi et al., 2024), previously referred to as Eating Disorders Not Otherwise Specified (EDNOS). OSFED can include presentations including atypical AN, purging disorder, night eating syndrome and subthreshold BN and BED (Krug et al., 2024). Much less is known about the epidemiology of pica, rumination and Avoidant/Restrictive Food Intake Disorder (ARFID) which are classified as Other Feeding and Eating Disorders (FEDs) (Pike et al., 2023).

Social Anxiety Disorder (SAD), also referred to as Social Phobia, presents as persistent fear and avoidance of social interactions stemming from concerns about being judged by others (Schneier & Goldmark, 2015). SAD has been found to be one of the most common comorbid anxiety disorders in EDs (Harrison et al., 2018; Swinbourne, 2008). Rates of SAD across the lifespan in Anorexia Nervosa (AN) range from 16-88.2%, and in Bulimia Nervosa (BN) have been found to be between 17-67.8% (Harrison et al., 2018). This compares to a prevalence rate of 12% in the general population (Kessler et al., 2005). This link between social anxiety (SA) symptoms and ED symptoms have also been observed in non-clinical populations of young people (Brosof et al., 2019; Cance et al., 2015; DeBoer et al., 2013).

While there is clear evidence for the comorbidity between SAD and ED, the literature examining the connections between both has been growing in recent years. Common symptoms across SAD and ED include appearance anxiety and fears about eating in public (Jin et al., 2022; Levinson et al., 2018; Levinson et al., 2014; Levinson et al., 2019). Consensus has not yet been reached on the underlying mechanisms connecting these disorders. Multiple explanations for the link between SAD and ED have been proposed, with some studies suggesting it is bidirectional and others suggesting it is reinforcing (Levinson & Rodebaugh, 2016). BN has been found to predict later presentation of SAD (Buckner et al., 2010).

It has also been suggested that there are common underlying vulnerability factors for both SAD and ED including fear of negative evaluation, maladaptive perfectionism and social appearance anxiety (DeBoer et al., 2013; Levinson & Rodebaugh, 2012; Levinson et al., 2013; Shafran et al., 2002). SAD has also been found to be a barrier to accessing support for ED (Goodwin & Fitzgibbon, 2002). Therapy itself can be seen as a social interaction, and people with SAD often use fear-based behavioural strategies in treatment which may impact experiences of therapy (Clark et al., 2005). However, SAD at baseline is not a contraindication for ED treatment and accessing cognitive behavioural treatment for ED has been found to reduce SA symptoms (Ho et al., 2024).

Increasingly, the age of adolescence is being recognised as a period between ages 10-24, reflecting current social transitions as well as psychological and biological development (Sawyer et al., 2018). Young people are particularly at risk of

developing both ED and SAD. The median onset of SAD is 13 years of age, with 90% of those with the disorder being diagnosed by 23 (Beesdo et al., 2010). EDs, including AN and BN, typically begin to manifest and show peak onset during adolescence or young adulthood, with an observed trend indicating a reduction in the age of onset in recent years (Favaro et al., 2019; Rapee et al., 2019). Further, Rapee et al. (2019) classify ED and SAD as social-emotional disorders and argue this increased incidence is impacted by adolescent-specific biopsychosocial changes during this period, including hormonal and morphological changes, changes in emotional regulation, peer relationships and self-concept. Experience of a mental disorder in childhood can hinder a child from navigating significant developmental milestones and transition to adulthood. Children and adolescents who are diagnosed with mental disorders have a higher likelihood of experiencing less favourable sociodemographic, clinical and functional outcomes even long after a disorder initially presents (Asselmann et al., 2018).

Theoretically, cognitive-behavioural models are widely used in understanding both ED and SAD (e.g.(Heimberg et al., 2014; Mares et al., 2022). Both ED and SAD involve cognitive (e.g. perceptual and interpretative biases) and behavioural (e.g. avoidance and self-soothing behaviours) factors that maintain psychopathology. Further, cognitive behavioural treatments are recommended by the National Institute for Health and Care Excellence (NICE) for both SA and ED (NICE, 2013, 2017). As both SAD and ED commonly occur, it is worth considering whether shared cognitive-behavioural mechanisms might clarify this relationship.

Currently, two prior reviews have examined the comorbidity between EDs and SA (Harrison et al., 2018; Swinbourne, 2008). A further systematic review and meta-analysis examined the relationship between eating disorders and social physique anxiety (SPA)(Alcaraz-Ibáñez et al., 2023). Nevertheless, these reviews concentrated on the association between these two disorders across the lifespan. Given the evidence indicating the initial presentation of these disorders in younger populations, the present study aims to explore these interrelations within a younger population (10 to 24 years).

Aim

The aim of this systematic review was to gather and synthetise the available research regarding the presentation of SA symptoms in young people aged between 10—24 with clinical diagnosis of an eating disorder, specifically AN, BN, BED and OSFED. Strengths and limitations of the review, clinical implications of the findings and directions for future research were also considered.

Research questions:

- What are the rates of SA symptoms in adolescents and young people with an ED diagnosis?
- What are the characteristics and patterns of comorbidity between SA symptoms and EDs in this population?
- What is the impact of SA symptoms and ED on treatment outcomes for this population?

Methods

The study was conducted in accordance with Preferred Reporting Items for Systematic Reviews and Meta Analysis (PRISMA) guidelines (Page et al., 2021) to explore the available evidence in the relevant literature. The review was pre-registered on PROSPERO (CRD42024569372; Appendix X).

Inclusion and Exclusion Criteria:

Articles were included in the review if they met the following criteria.

Inclusion criteria:

- Peer-reviewed empirical research and qualitative studies
- One clinical sample of ED with the sample aged between 10 and 24, including those who met clinical thresholds for ED diagnosis through specific ED measures or DSM-V criteria.
- Examining symptoms of SA, specifically in young people with AN, BN, BED and OSFED.
- Included outcome measures or participants met diagnostic criteria for SAD/ED.

Exclusion criteria

- Publications not available in English.
- Case reports.
- Studies involving participants under 10 or over 24 years old or lacked extractable age specific data. If studies included young adults up to the age of 25 but the mean age fell between 10-24 with a small standard deviation (<2), these were considered individually for inclusion by the research team.
- Systematic reviews, conference papers or poster presentations.

Search Strategy

Searches were completed on CINAHL, Embase, MEDLINE, PsycINFO and Scopus in April 2025. Search terms were developed with librarians at the University of Oxford and Oxford NHS Foundation Trust and are included in Appendix B. Search terms related to SA and EDs in children and adolescents. No search limits were applied. It is good practice to use MeSH terms to identify relevant papers when conducting systematic reviews (Siddaway et al., 2019). However, differences in database terminology meant the same thesaurus and MesH terms could not be used across all searches. Full search strategies for each database are provided in Appendix C.

Endnote 20 software was used for reference management and duplicate removal. References were then uploaded to Rayyan (Ouzzani et al., 2016) for reference management during screening.

Selection of Articles

Studies were independently selected by the first author initially through title and abstract examination followed by full-text screening. A second reviewer independently screened 25% of titles and abstracts (406) and subsequently 25% of full-text articles (34). Any uncertainties or discrepancies regarding study eligibility were addressed through case-by-case discussions within the research team. 2,900 papers were initially identified, of which 1251 were duplicates. 17 studies adhering to the inclusion and exclusion criteria were identified to be included in the systematic review. Figure 1 demonstrates the study selection procedure. Inter-coder reliability

was calculated for both using Cohen's Kappa and was .93 (98.43%) for the abstract/title screen and 1 (100%) for the full text screen, both of which are considered excellent agreement (Cohen, 1960).

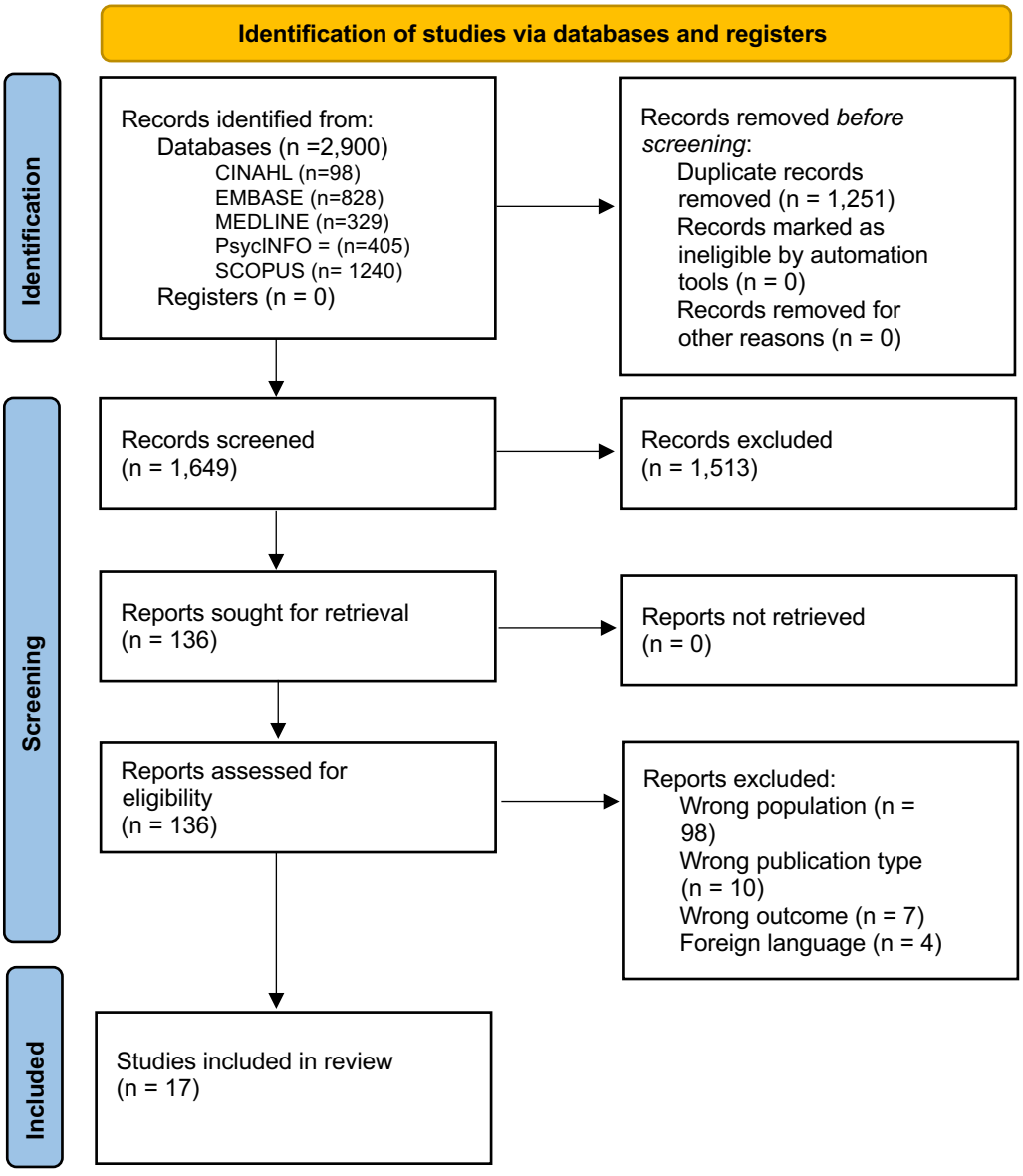

Figure 1. PRISMA diagram of study selection

Data Collection and Analysis

Data were extracted from each of the included papers using a standardised data extraction template developed by the research team (Appendix D). A second reviewer extracted data from 50% (9) of the articles. Given the heterogeneity in the studies identified, a narrative review approach was adopted for analysis as it allowed for the evaluation and integration of the various methodologies and theoretical frameworks (Pearson et al., 2015). Further, this has been previously identified as a better way of addressing topics with broader research questions (Baethge et al., 2019).

Quality Assessment

The quality of papers was evaluated using the Standard Quality Assessment Criteria (Kmet et al., 2004). Each study was evaluated based on the criteria described for quantitative reports which included 14 questions rated on a 3-point scale, yes (2), partial (1) and no (0). Items not applicable due to study design were marked “N/A”. The assessment included evaluation of the research question, participant selection, study design, statistical analyses and reporting of results and discussion. Each study’s overall score was calculated by dividing it’s total score by the maximum possible score. Studies were categorised as low (≤0.55), medium (0.56-0.75) or high quality (≥0.76). A second researcher assessed the quality of a sub-section of 50% of included papers using the same tool. Inter-coder reliability for the quality assessment was calculated using Cohen’s Kappa and was .85 (87.5%), which is considered excellent agreement (Cohen, 1960).

Results

Description of studies

Mean age of the participants included in the studies ranged from 11.8 to 18.2. Three studies were conducted in non-western regions (Iran =2, Turkey =1), 14 were conducted in Western regions (North America =5, Europe = 9). From the retrieved studies 14 used cross-sectional design and 3 were longitudinal cohort studies. Key characteristics of the included studies are summarised in Table 1.

Quality assessment scores of the included studies ranged from 0.59 to 0.86, with a mean score 0.78. Scores are summarised in Table 2. Scoring is described below and included in Appendix F. 14 of the studies were of high quality (Buchholz et al., 2007; Courty et al., 2015; Dakanalis et al., 2016; Delaquis et al., 2023; Duclos et al., 2014; Garcia et al., 2020; Gross & Rosen, 1988; Mattar et al., 2012; Mohammadi et al., 2020; Obeid et al., 2013; Ohmann et al., 2013; Ranta et al., 2017; Vardar & Erzengin, 2011; Zonnevylle-Bender et al., 2004), while three were rated as medium quality (Mohamadirizi et al., 2014; Schulze et al., 2009 and Spettigue et al., 2020). Common limitations across studies included small clinical samples, incomplete reporting of participant characteristics, use of non-standardised ED measures, and inadequate controlling for confounders. While the evidence base included in this review is generally robust, some findings should be interpreted with caution,

particularly from those studies that were of medium quality as methodological weaknesses may have impacted results and conclusions drawn.

Social anxiety and eating disorder measures

All studies included in the review included at least one group with a clinical diagnosis of an ED (AN, BN, BED, OSFED) or met clinical-cut offs for these diagnoses. BMI ranged from 13.84 to 22.30 in clinical samples. SA symptoms and ED were assessed through clinical interview or through a variety of self-report measures. Details of assessment tools across studies are described in Table 1.

Table 1. Descriptive Information from Included Studies

	Study	Country	Design	Sample (N)	Recruitment Source	Mean Age (Range)	Gender	Ethnicity	ED Measures Used	Mean (SD) ED Score	BMI	SA Measures Used	Mean (SD) SA Score
1	Spettigue et al. (2020)	Canada	Cross sectional	Total ED 308	ED Programme and weight management programme	ED 15.67 (13.03-17.88)	Female 93.8%	NR	ED Diagnosis	NR	NR for ED Population	MASC-SA	
				ED/no binge168									ED/no binge 61.95 (13.24)
				ED/Binge 140			Male 6.2%		EDEQ-A (items 16/17)				ED/binge 65.77 (10.99)
				Obesity 182		Obesity 15.47 (13-17.93)							
2	Gross & Rosen (1988)	United States	Cross sectional	65 BN (female)	Public Schools	NR (Grades 9-12)	Female 51%	White 75%	EAT	NR	NR	SADS	BN (female) 9.49 (7.03)
				8 BN (male)				Black 16%	EDI				BN (male) 15.29 (5.9)

				612 HC (female)			Male 49%	Asian 3%	DSM III Criteria				HC (female) 6.98 (6.14)
				645 HC (male)				Hispanic 6%					HC (male) 7.69 (4.5)
3	Delaquis et al. (2023)	France	Cross sectional	145	Inpatient Services	18.2 (13.2-24.5)	94% Female	NR	EDEQ	Restraint 2.8 (1.8)	14.3 (1.6)	LSAS	Social Fear 30.9 (16.1)
										Eating 2.8 (1.4)			
							6% Male		ED Diagnosis	Shape 3.9 (1.4)			Social Avoidance 14.4 (10.3)
										Total 3.4 (1.4)			
4	Garcia et al. (2020)	United States	Cross sectional	534 (total)	Population based sample	17.6 (1.8) 15-25	100% female	White 82.2%	DSM-V ED Criteria	NR	23.58 (total sample)	SCID (DSM-IV	NR (included in study if

	28 ED (13 - AN, BN, BED; 15 with purging disorder or non-purging OSFED)	Black/African American 11.7%		social phobia)	definite – all criteria met or probable all criteria met and one subthreshold)
		Multiracial 4.6%			
		Asian American 0.7%			
		Native American 0.4%			
		Hispanic/ Latina 8%			
		Did not report 0.4%			

5	Obeid et al. (2013)	Canada	Cross sectional	182 AN-R or EDNOS-R	Children's tertiary care facility	15.56 (12-14 Mid-Adolescence; 15-17 Late Adolescence)	100% Female	NR	ED Diagnosis	NR	Restrictive mid, late Adolescence, 17.02 (2.27),17.05 (2.14)	MASC Social Anxiety Subscale	Restrictive mid, late Adolescence, 14.49 (7.32),14.2 (7.19)
				99 AN-BP or EDNOS-BP							BP mid, late Adolescence, 20.55 (3.50), 19.44 (3.71)		BP mid, late Adolescence, 15.21 (6.04), 16.14 (6.94)
				63 BN							BN mid, late adolescence 22.02(2.63), 22.30 (3.79)		BN mid, late adolescence 19.89 (5.71),14.08 (6.78)

6	Ranta et al. (2017)	Finland	Longitudinal cohort	T1 3278 (BN 25, AN19) T2 2070 (BN 41, AN 19)	Finnish Adolescent Mental Health - Cohort Study	T1 15.5 (0.39;15-16)) T2 17.6 (0.41)	T2 54.6% Female T2 54.6% Female	NR	DSM IV-TR Criteria	NR	BMI >/= 20	SPIN	NR
7	Vardar et al., (2011)	Turkey	Cross sectional	Overall ED 68 (AN 1, BN 23, BED 29, EDNOS 15) Control Group 68	High School Students	ED group 17.04 +/- 0.8 years Control group 16.9 x/- 0.7 years	86.6% Female 13.2% Male	NR	EAT DSM-III-R (SCID)	>/=30	ED group 21.41 ± 2.29 Control Group 20.21 ± 2.43	SCID (DSM-III-R classification)	NR
8	Mohamadirizi et al., (2014)	Iran	Cross sectional	361	Government Schools	NR (range 14-19)	100% Male	NR	Questionnaire of Eating Disorder	ED 12.12± 3.6 AN 9.1±2.6	23.25 ± 0.3	Social Anxiety Symptom Questionnaire	14.98 (1.0)

										BN 3±1.1			
9	Schulze et al. (2009)	Germany	Cross sectional	23AN	Inpatient Psychiatric services	AN 14.69 (1.54)	100% AN	NR	AN ICD-10 Criteria	NR	14.7 (1.58)	SPAI-C	AN 17.4 (9.7)
				145 PC		PC 13.29 (2.86)							PC 16.52 (10.77)
				1197 HC		HC 12.51 (2.05)							HC 12.51 (7.87)
10	Dakanalis et al. (2016)	Italy	Cross sectional	189 young adolescent female ED	Specialist eating disorder services	Young adolescent 11-14 12.59 (0.70)	90.1% Female	92% Caucasian	EDE	NR	AN 15.52, (1.24)	SIAS	YF SIAS 30.29 (12.61)
													YF SPS 37.33 (12.49

							YF BFNE 39.86 (11.05)
	15 young adolescent male ED						YM SIAS 29.88 (12.24)
				DSM-IV ED Diagnosis	BN 21.18, (2.07)	SPS	YM SPS 32.31 (13.13)
	444 older adolescent female ED	Older adolescent 15-18 16.74 (0.61)	9.9% Male				YM BFNE 32.01 (12.88) OF SIAS 37.01 (13.06)
							OF SPS 44.41 (13.88)
	55 older adolescent male ED						OF BFNE 15.55 (10.55)
					EDNOS 20.05, (3.54)	BFNE	OM SIAS 36.65 (13.32)

													OM SPS 34.35 (12.96) OM BFNE 34.69 (11.11)
11	Duclos et al. (2014)	France	Cross sectional	60 AN	Inpatient	16.6 (1.6) 13-21	100% female	NR	AN Diagnosis	NR	16.9 (1.1)	LSAS	48.3 (31.3)
12	Mattar et al. (2012)	France	Longitudinal cohort	24 AN-R	Inpatient	16.38 (1.93) 13.68-20.60	100% female	NR	AN Diagnosis	NR	Admission 13.84 (1.26) Discharge 17.79 (1.21)	LSAS	Admission 47.04 (28.30) Discharge 24.95 (26.91)
13	Buchholtz et al. (2007)	Canada	Cross sectional	149 49AN 27 BN 1BED 72 EDNOS	Tertiary care children's hospital	15.65 (1.17) 13-18	100% female	NR	EDI-2 DSM-IV ED Diagnosis	NR	20.06 (3.39)	MASC	15.02 (7.17)

14	Zonnevylle-Bender et al. (2004)	Netherlands	Cross sectional	28 adolescent AN	Eating disorder clinic (inpatient and outpatient)	15.5 (1.1)	NR	NR	AN Diagnosis	NR	14.8 (SD: 3.3)	SPAI – Social Phobia subscale	80 (31.4)
15	Ohmann et al. (2013)	Germany	Longitudinal cohort	29 AN	Outpatient	14.3	100% female	NR	EDEQ	NR	Pre 15.7 ± 1.3	SIAS SPS	Baseline SIAS 24.1 (9.1)
											T1 16.4 ± 1.5		Baseline SPS 15.4 (9.9)
				22 AN-R							T2 17.5 ± 1.7		9 months SIAS 26.7 (14.3)
											T3 17.8 ± 1.7		9 months SPS 14.6 (15.0)
				7 BP							T4 17.8 ± 1.5		
16	Courty et al. (2015) follow up on 12	France	Cross sectional	60 AN	Inpatient	Baseline 16.0 (1.6) 13-21	100% female	NR	EDI	NR	Baseline 16.9 (1.1) [13.7–19.5]	LSAS	Baseline 48.3 (31.3)

				52 AN-R		AN-R 15.8(1.59)			DSM-IV Criteria AN		6 months 16.8 (1.5) [12.9–20.1]		6 months 33.1 (27.9)
						AN-BP 17.3 (2.4)					12 months 17.0 (1.8) [14.5–22.5]		12 months 33.2 (29.7)
				8 AN-BP							18 months 17.8 (2.3) [14.2–24.3]		18 months 27.2 (26.3)
17	Mohammadi et al, 2020	Iran	Cross sectional	585 (aged 6-18)	National study	11.8 (3.8) entire sample	52% Female	NR	ED Diagnosis	NR	NR	K-SADS--PL	NR
				200 SA (aged 10-14)			48% Male						

AN = Anorexia Nervosa, AN-BP= Anorexia Nervosa – Binge Purge, AN- R = Anorexia Nervosa – Restricting, BED = Binge Eating Disorder, BFNE = Brief Fear of Negative Evaluation Scale(Leary, 1983), BMI = Body Mass Index, BN = Bulimia Nervosa, BP = Binge Purge, DSM III = Diagnostic and Statistical Manual of Mental Disorders Third Edition (American Psychiatric Association, 1980), DSM III = Diagnostic and Statistical Manual of Mental Disorders Third Edition Revised (American Psychiatric Association, 1987), DSM IV = Diagnostic and Statistical Manual of Mental Disorders Fourth Edition (American Psychiatric Association, 1994), DSM IV TR= Diagnostic and Statistical Manual of Mental Disorders Fourth Edition – Text Revised (American Psychiatric Association, 1997), DSM V = Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (American Psychiatric Association, 2013), EAT = Eating Attitudes Test (Garner et al., 1982), ED = Eating Disorder, EDI = Eating Disorder Inventory (Garner et al., 1983), EDI-2 = Eating Disorder Inventory – Second Edition (Garner, 1991), EDEQ = Eating Disorder Examination Questionnaire (Fairburn & Beglin, 1994), EDEQ-A = Eating Disorder Examination Questionnaire – Adolescent Version (Carter et al., 2001), EDNOS = Eating Disorder Not Otherwise Specified, EDNOS – BP = Eating Disorder Not Otherwise Specified – Binge Purge, EDNOS – R = Eating Disorder Not Otherwise Specified – Restricting, HC = Healthy Control, ICD – 10 = International Classification of Disease Tenth Edition (World Health Organization, 1992), LSAS = Liebowitz Social Anxiety Scale (Liebowitz, 1987), MASC- SA = Multi Anxiety Scale Children - Social Anxiety Scale (March et al., 1999), M = Mean, NR = Not Reported, OF = Older Female, OM = Older Male, OSFED = Other Specified Feeding or Eating Disorder, PC = Psychiatric Control, SADS = Social Avoidance and Distress Scale (Watson & Friend, 1969), SCID = Structured Clinical Interview for Disorders (First, 1997), SD = Standard Deviation, SIAS = Social Interaction Anxiety Scale (Mattick & Clarke, 1998), SPAI = Social Phobia and Anxiety Inventory (Turner et al., 1989), SPAI-C = Social Phobia and Anxiety and Inventory for Children (Beidel et al., 1995), SPS = Social Phobia Scale(Mattick & Clarke, 1998), T1 = Time 1, T2 = Time 2, T3 = Time 3, YF = Young Female, YM = Young Male.

Narrative Review

Finding from the included studies are summarised in Table 2. The findings were organised according to the first three questions outlined in the aims of the study, focusing on rates of SA and ED, understanding co-morbidity and treatment engagement and outcomes.

Table 2. Findings from Included Studies

	Study	Rates of SA and ED	Understanding co-morbidity	Treatment Engagement and Outcomes	Quality Score
1	Spettigue et al. (2020)	ED 45.5% ED/no binge 48% ED/Binge 59% Obesity 49.5%	Higher SA scores in binge eating group (M = 65.77, SD = 13.24) vs no binge (M = 61.95, SD = 10.99). Frequency not associated with SA.	NR	0.72
2	Gross & Rosen (1988)	SA higher in BN than HC – did not reflect severe psychological distress	SA predicted global eating disturbance (female) – 1.4% of variance.	NR	0.86
3	Delaquis et al. (2023)	NR	Fear related to SA central symptom node in ED (0.96). Avoidance related to SA not as central Fear and avoidance strongly linked (part *r* = 0.67) – missing avoidance data	NR	0.77
4	Garcia et al. (2020)	ED 12.5% HC 4.7%	NR	NR	0.77
5	Obeid et al. (2013)	NR	No significant differences between subtypes on measures of SA SA generally stable between early and late adolescence	NR	0.77
6	Ranta et al. (2017)	NR	SAD at 15 predicted BN at 17 ($p < .001$) – reduced when depression controlled for. BN/AN at 15	SAD impacted treatment engagement/outcomes negatively SAD at 15 predicted no treatment seeking for BN at 17 – not observed for AN	0.86

			did not predict SAD at 17		
7	Vardar et al., (2011)	ED 5.9% BN 4.3% BED 10.3% HC 0%	NR	NR	0.77
8	Mohamadirizi et al., (2014)	SA scores significantly correlated with ED scores	NR	NR	0.59
9	Schulze et al. (2009)	AN 35%	All patients with SAD and AN at admission had history of separation anxiety.	NR	0.63
		AN 61% scored over the 50th percentile 96% of sample fulfilled DIPS criteria for SAD on admission, not diagnosed by any clinician.	SA scores positively associated with ineffectiveness ($p < 0.05$) and interpersonal distrust ($p < .0002$) on EDI.		
10	Dakanalis et al. (2016)	NR	Fear related to anxiety – strong predictor of SA in ED sample.	NR	0.86
11	Duclos et al. (2014)	Mean anxiety 48.3 (mild to moderate) SD – 31.3	NR	NR	0.82
12	Mattar et al. (2012)	NR	NR	Psychodynamic ED intervention – improvements in SA following treatment – (Admission (M = 47.04, SD = 28.30), Discharge (M = 24.95, SD (26.91) even when eating behaviours removed.	0.77
13	Buchholtz et al. (2007)	NR	SA predicted – body dissatisfaction in girls.	SA significantly associated with self-silencing ($p < .01$).	0.77
14	Zonnevylle-Bender et al. (2004)	AN 25.5%	SAD in adolescent ED = 25% vs adult ED = 50%	NR	0.82
15	Ohmann et al. (2013)	NR	NR	CBT ED treatment – SA quickly improved on SPS (Pre 14.2 ± 7.7, Post 11.7 ± 10.6) SIAS remained stable (Pre 24.6 ± 8.9, Post 24.5 ± 8.5).	0.77
16	Courty et al. (2015) follow up on 12	AN and AN-R 17%	No observable difference between AN-R and AN-BP groups	FBT ED treatment – decrease on both EDI (Inclusion 60.7 (35.1), 18 months 46.1 (27.7)) and LSAS (inclusion 48.3 (31.3),18 months 27.2 (26.3)).	0.86
17	Mohammadi et al, 2020	ED in SAD sample (10-14 years) - 4.1%	ED higher in 10-14 y/o (4.1%) than 6 y/o (3.5%) (not significant).	NR	0.82

AN = Anorexia Nervosa, AN-BP= Anorexia Nervosa – Binge Purge, AN- R = Anorexia Nervosa – Restricting, BED = Binge Eating Disorder, BN = Bulimia Nervosa, CBT = Cognitive Behaviour Therapy, DIPS = Diagnostic Interview for Psychoses, ED = Eating Disorder, EDI = Eating Disorder Inventory (Garner et al., 1983), FBT = Family Based Therapy, HC = Healthy Control, LSAS = Liebowitz Social Anxiety Scale (Liebowitz, 1987), M = Mean, NR = Not Reported, SA = Social Anxiety, SAD = Social Anxiety Disorder, SD = Standard Deviation, SIAS = Social Interaction Anxiety Scale (Mattick & Clarke, 1998), SPS = Social Phobia Scale(Mattick & Clarke, 1998).

Rates of Co-occurring Social Anxiety and Eating Disorders

Six of the included studies reported on rates of SA symptoms in young people with diagnosis of Eating Disorders (Courty et al., 2015; Garcia et al., 2020; Schulze et al., 2009; Spettigue et al., 2020; Vardar & Erzengin, 2011; Zonnevylle-Bender et al., 2004), one reported on ED rates in a SAD sample (Mohammadi et al., 2020) and three reported on SA symptoms in ED populations (Duclos et al., 2014; Gross & Rosen, 1988; Mohamadirizi et al., 2014). Co-occurring SA symptoms were observed across different ED diagnosis. Whilst rates of co-morbid SA symptoms and ED varied considerably, SA symptoms were more commonly observed in ED populations than in healthy control (HC) groups.

Social Anxiety and Mixed Eating Disorder Groups

Four studies reported on SA rates in mixed ED samples (Garcia et al., 2020; Mohammadi et al., 2020; Spettigue et al., 2020; Vardar & Erzengin, 2011). In one study 48-59% of those with an ED diagnosis had met clinical threshold for SAD (Spettigue et al., 2020). While this study was of overall medium quality, sufficient sample sizes and use of standardised measures for social anxiety provide support for this finding. Higher SA was also observed in this ED sample compared to those with obesity (Spettigue et al., 2020). In a high quality study, with appropriate same sizes and measures, comparing ED groups to a HC group, SAD was primarily observed in the ED group (5.9%) while it was not observed in the HC group (0%) (Vardar & Erzengin, 2011). In a population-based sample, individuals had higher rates of SA when they had an ED

diagnosis (12.5%) compared to those without ED (4.7%), suggesting they were more than twice as likely to also present with an ED (risk ratio: 2.68). While this study was of high quality, the authors indicated this should be interpreted with caution due to small sample sizes (Garcia et al., 2020). While they did not report specific rates, Mohamadirizi et al. (2014) found that SA scores significantly correlated with ED scores in a sample of young males with ED, however it is important to note that this study did not include validated measures and did not receive any points for it's use of measure in the quality assessment. One high quality study using both validated measure and appropriate sample size, exploring co-morbidity in a SAD sample found clinical EDs were present in 4.1% of 10-14 year olds with SAD (Mohammadi et al., 2020).

Anorexia Nervosa and Social Anxiety

In the four studies investigating SA in individuals presenting with AN (Courty et al., 2015; Duclos et al., 2014; Schulze et al., 2009; Zonnevylle-Bender et al., 2004), co-occurring SAD was observed in 17% (Courty et al., 2015) to 25.5% (Zonnevylle-Bender et al., 2004). Another study reported that 35% of AN patients met criteria for SAD, while 61% scored over 50th percentile (Schulze et al., 2009). However the co-morbidity was not specific to AN, with no significant difference found when rates of SA were compared with young people with other mental health conditions (Schulze et al., 2009). Of note, this study was of medium quality and the quality assessment highlighted concerns relating to sample size and used validate SA measures. Duclos et al. (2014) found on average AN patients had mild to moderate SA (mean score 48.3) however the

large standard deviation (31.3) indicated substantial variation. Clinician factors may also play a role in identifying co-occurring SAD and ED, Schulze et al. (2009) found that while 96% of the sample fulfilled criteria for SAD at admission to inpatient services according to parent reported structured interviews with parents (DIPS), SAD was not diagnosed in any case based on unstructured clinical interviews. While the paper by Schulze et al. (2009) only received partial scores for measures used in the quality assessment, the SA measures were validated.

Bulimia Nervosa and Social Anxiety

Two high quality studies examined SA in those presenting with BN (Gross & Rosen, 1988; Vardar & Erzengin, 2011). In the first study 4.3% of a sample of BN patients scored in the clinical range for SAD (Vardar & Erzengin, 2011). A second study found female adolescents with BN demonstrated higher levels of SA than HC, however their scores did not reflect severe psychological distress (Gross & Rosen, 1988). SA was also higher in boys with BN compared to HC, but this was not investigated statistically due to small sample size (Gross & Rosen, 1988).

Binge Eating Disorder and Social Anxiety

One high quality study described SAD in BED populations with 10.3% scoring in the clinical range. (Vardar & Erzengin, 2011).

Understanding co-morbidity

Differences in SA symptom presentation between diagnostic subtypes

Three studies investigated differences in SA between subtypes of eating disorder diagnoses (Courty et al., 2015; Obeid et al., 2013; Spettigue et al., 2020). One high-quality study separated the groups by diagnosis and symptom presentation into a restricting group (including AN-Restricting (AN-R), EDNOS-R, Binge/Purge (BP) symptoms (including AN-P, -B, or -BP, and EDNOS-P, -B, or -BP) and BN, however no differences between subtypes were observed on measures of social anxiety (Obeid et al., 2013). Similarly, in a second high-quality study considering AN subtypes no observable difference was found in SA between AN-R and AN-BP groups (Courty et al., 2015). Conversely, in a medium-quality study comparing mixed ED samples with binge/non-binge type symptoms, those who had binge eating symptoms had much higher SA scores when compared to those who did not binge (Spettigue et al., 2020). However, binge frequency was not associated with SA (Spettigue et al., 2020).

Direction of relationship

One high quality longitudinal study suggested that SA may act as a predisposing risk factor for the development of EDs (Ranta et al., 2017). They found SAD at age 15 predicted BN at age 17, although this association diminished when depression was controlled for, suggesting depression may influence this relationship. This is of particular note, as the quality assessment identified that many of the studies included did not control for confounders (Delaquis et al., 2023; Duclos et al., 2014; Obeid et al., 2013; Mohammadi et al., 2020; Mohamadirizi et al., 2014; Spettigue et al., 2020) and some only received partial points (Bucholz et al., 2007; Garcia et al., 2020; Gross &

Rosen, 1998; Mattar et al., 2012; Vardar et al., 2011) this further highlights the need to interpret the findings with caution.

Conversely, BN or AN at 15 did not predict SAD at 17, suggesting ED might not lead to SAD (Ranta et al., 2017).

Other studies identified SA as a predictor of specific ED symptoms, particularly body dissatisfaction in adolescent girls (Buchholz et al., 2007). Similarly, SA predicted global eating disturbance in girls accounting for 1.4% of the variance (Gross & Rosen, 1988). Schulze et al. (2009) noted in their study that nearly all patients with SAD and AN on admission to an inpatient psychiatric service had history of separation anxiety, suggesting a potential developmental trajectory. One study reported that appearance related anxiety was found to be a strong predictor of SA in individuals with ED (Dakanalis et al., 2016).

Impact of Age

Three high-quality studies explored co-occurring ED and SA in different age groups across the lifespan. Mohammadi et al. (2020) found that presence of ED in a SAD sample to be slightly higher in 10-14 year olds than in 6-10 year olds, however this was not a significant difference. Obeid et al. (2013) found presentation of SA in ED patients remained generally remained stable between early adolescence (12-14 years) and late (15 to 17 years) suggesting their presentations remain generally constant throughout this period. When compared with adults, SAD was less common in an adolescent clinical ED population (25%) compared to adults (50%) (Zonnevylle-Bender et al., 2004).

Patterns of Co-morbidity

Two studies identified possible shared patterns between both SA and AN (Delaquis et al., 2023; Schulze et al., 2009). One study found SA scores to be positively associated with ineffectiveness and interpersonal distrust as measured by the EDI (Schulze et al., 2009). A network analysis identified fear related to SA as a central symptom node in EDs (Delaquis et al., 2023). Avoidance related to SA was not as central as fear related to SA. However, there was a strong link between fear and avoidance. Both the study and the quality assessment highlighted that there were missing data for the avoidance measure which could have impacted these findings (Delaquis et al., 2023).

Treatment Engagement/Outcomes

One high-quality longitudinal study explored the impact of SA symptoms on treatment engagement (Ranta et al., 2017). SA was found to negatively affect treatment engagement and outcomes in individuals with ED. Ranta et al. (2017) found SAD at age 15 predicted an individual not seeking treatment for BN after 2 years, however this was not observed for those with a diagnosis of AN. Similarly, SA was also significantly associated with self-silencing behaviours in a ED sample (Buchholz et al., 2007).

Three studies reported on outcomes for populations being treated for ED in inpatient settings (Courty et al., 2015; Mattar et al., 2012; Ohmann et al., 2013). While all three studies were focused on ED treatment and used different

approaches, improvement in SA scores were observed across all three studies, despite SA not being specifically targeted.

In one study where an inpatient service used a psychodynamic approach to ED treatment, improvements in SA were observed following treatment, these improvements remained stable even when eating behaviour items were removed from the measure analysis (Mattar et al., 2012).

In another study where the inpatient service used a family based therapy approach, Courty et al. (2015) found an overall concurrent decrease in both EDI and LSAS scores over an 18 month period. While mean EDI scores decreased at each timepoint (inclusion, 6 months, 12 months and 18 months), mean LSAS scores dropped between inclusion and 6 months, remained generally stable between 6 months and 12 months (0.1 increase at 12 months) before decreasing again at 18 months. However, ranges and standard deviations in LSAS scores were large indicating caution should be taken when interpreting these results.

Ohmann et al. (2013) evaluated a cognitive behavioural group therapy (G-CBT) where the primary goal was stable weight gain and the secondary goal was improved emotional functioning. Results for outcomes of emotional targets were grouped according to outcomes relating primarily to BMI changes. They found SA as measured by the Social Phobia Scale (SPS) improved quickly in inpatients who had good outcomes while scores increased for those with poor

outcomes. Interestingly scores on the Social Interaction Anxiety Scale (SIAS) tended to remain unchanged in all participants (Ohmann et al., 2013).

As all of these treatment studies were rated as high-quality, this provides strong evidence that SA can improve during ED treatment. However, the lack of change on the SIAS suggests that not all symptoms of SA respond to ED treatment.

Quality analysis

The Standard Quality Assessment criteria (Kmet et al., 2004) was used to assess the quality and risk of bias of all the studies included (Appendix E). The quantitative version was completed for all 17 papers (Appendix F). The included papers ranged in quality with scores ranging from 0.59 – 0.86, where higher scores indicating higher quality studies. The mean quality score was 0.79. Three papers were of medium quality (Mohamadirizi et al., 2014; Schulze et al., 2009; Spettigue et al., 2020), and 14 papers were of high quality (Buchholz et al., 2007; Courty et al., 2015; Dakanalis et al., 2016; Delaquis et al., 2023; Duclos et al., 2014; Garcia et al., 2020; Gross & Rosen, 1988; Mattar et al., 2012; Mohammadi et al., 2020; Obeid et al., 2013; Ohmann et al., 2013; Ranta et al., 2017; Vardar & Erzengin, 2011; Zonnevylle-Bender et al., 2004).

14 of the papers utilised a cross-sectional design. Due to this design three questions were omitted from each of the quality assessments including questions regarding randomisation and blinding of investigators and subjects. Across these papers aims were generally well described with all papers

receiving full points. Results were well reported across the studies with only one paper receiving partial points (Schulze et al., 2009). Similarly, almost all of the paper's conclusions were appropriate with only two receiving partial points (Mohamadirizi et al., 2014; Spettigue et al., 2020). Analytic methods were also a strength of these studies with just one receiving a partial score (Zonnevylle-Bender et al., 2004).

As demonstrated throughout the results section, some issues of reporting were highlighted during the quality appraisal. Most papers received partial points for their description of study design with only three explicitly stating the cross-sectional nature of the studies (Mohamadirizi et al., 2014; Mohammadi et al., 2020; Spettigue et al., 2020). Many papers did not use specific ED outcome measures and did not report scores for these, and one paper did not use standardised measures (Mohamadirizi et al., 2014) and so did not receive any points.

Another area where papers received partial scores was sample size with six papers only receiving partial scores (Courty et al., 2015; Delaquis et al., 2023; Duclos et al., 2014; Schulze et al., 2009; Spettigue et al., 2020; Zonnevylle-Bender et al., 2004), studies from the general population generally recruited larger samples than those who focused on clinical populations. Characteristics of group were generally missing some key information (e.g. ethnicity), with only two receiving full points (Dakanalis et al., 2016; Gross & Rosen, 1988). Only three papers appropriately controlled for confounders to be given a good score (Courty et al., 2015; Dakanalis et al., 2016; Zonnevylle-Bender et al., 2004), this

may limit the ability to distinguish the role of SA in ED from the effects of related or confounding factors, which may introduce bias into the reported findings.

Of the three papers who used cohort designs, all achieved a high score. With Ranta et al. (2017) scoring 0.86, Ohmann et al. (2013) and Mattar et al. (2012) scoring 0.77. In all three studies questions relating to randomisation and blinding of investigators and subjects were not applicable. All of the studies received partial points as they did not explicitly state their study design, and partial description of group characteristics. They all also received partial points for outcome and exposure methods as while all used an inpatient ED sample none of the papers used specific ED measures. Mattar et al. (2012) and Ohmann et al. (2013) had small sample sizes and so were awarded partial points. Mattar et al. (2012) also received partial points due insufficient controlling for confounders. Ohmann et al. (2013) received partial points for their conclusions section.

Discussion

Overview of results

SAD and ED often first present in adolescence and young adulthood, however the co-occurrence of these difficulties has not been examined specifically in this cohort. In order to address this, the present study summarised the existing literature pertaining to the rates and relationships between SA and ED in those aged between 10-25. Overall, the findings of this review further demonstrated the link between SA and ED, across multiple studies.

Rates of Co-occurring Social Anxiety and Eating Disorders

Despite wide variation in reported rates in the included studies, it is clear there are high rates of SA in young people with ED. SAD rates in ED patients were higher than HC (Garcia et al., 2020; Gross & Rosen, 1988; Vardar & Erzengin, 2011). However, rates of co-morbidity reported in this study were lower than that reported in lifespan samples and this remained true across ED diagnoses. While Schulze et al. (2009) found 96% of the sample fulfilled criteria for SAD at admission according to parent interviews, SAD was not diagnosed in any case through interviews with psychologists. As such, the highest rates reported in an AN sample was 35% (Schulze et al., 2009) which is lower than lifetime estimates previously reported as being as high as 88.2% (Swinbourne, 2008). Similarly, previously reported rates of SAD in BN patients across the lifespan have been as high as 67.8% (Swinbourne, 2008) compared to 4.5% in this study (Vardar & Erzengin, 2011). This is of particular interest as rates of social anxiety in children and adolescents are similar to those of adults (Sareen & Stein, 2000). However, there is much less available information available for young people than that of a lifespan cohort, with rates for some diagnostic groups being from only one study with small sample sizes.

Understanding co-morbidity

Findings on SA across ED diagnostic subtypes were mixed. While there were no significant differences between groups including BP and R subtypes, when binge type symptoms alone were examined significant higher SA scores were

observed. This may suggest that examining diagnostic subtype may not be sufficient for understanding the nuances of SA in ED, and may suggest that specific behaviours, particularly binge eating, may be more predictive of elevated SA. SA has previously been found to be significantly associated with overall ED psychopathology , including shape and weight concerns and binge eating frequency in an obese population with BED (Sawaoka et al., 2012). SA symptoms and binge eating syndromes (i.e. BN, BED) have both been loaded onto the body dissatisfaction subfactor on Forbush et al. (2018) Hi-Tide model of eating disorders, which may suggest that fear of negative evaluation may have a part to play in this behaviour.

Some studies suggested that SA may function as a developmental risk factor for the onset of EDs (Ranta et al., 2017; Spettigue et al., 2020). These findings echo research suggesting SA is a risk factor for developing ED (Godart et al., 2000; Swinbourne, 2008). This would also further evidence the cognitive-interpersonal model of AN, which posits that individuals who have difficulties with social situations are more vulnerable to developing the disorder and that social difficulties can act as a maintenance factor (Treasure et al., 2020).

Only one study looked at ED predating SA symptoms and found that ED diagnosis did not appear to predict later development of SA. These findings are contrary to recent findings in a broader systematic review that investigated anxiety symptoms and eating disorder symptoms, which found that there is a bi-directional relationship between anxiety symptoms and eating disorder symptoms (Trompeter et al., 2024).

When considering age, SA appeared to increase with age, although may have remained stable through the teen years. Previous research has suggested that longer illness duration of may result in more severity of SA in an ED population (Goddard & Treasure, 2013).

Treatment outcomes

There was some suggestion that presence of SA symptoms may impact treatment engagement and self-silencing in ED population. Previous research has suggested that SA may be a barrier to help seeking and engagement in treatment in those with ED (Goodwin & Fitzgibbon, 2002).

Evidence from this review suggests that SA symptoms can improve in those receiving treatment for ED, however this relationship may be dependent on the specific SA symptoms. Ohmann et al. (2013) found that performance related SA symptoms improved during treatment for ED, but that social interaction were generally stable. The measures used in the study might give insight into these differences. Participants SPS scores, focusing on anxiety related to being observed, improved but scores on the SIAS, measuring anxiety experienced during interpersonal interactions, remained stable. This suggests that fear of being observed may be more prominent in ED populations. Further research to understand the underlying reasons for this discrepancy could inform the mechanisms behind co-occurring SA and ED.

Results of this study suggest that decreases in SA were found when patients underwent treatment for ED across multiple modalities, family-based treatment, CBT and psychodynamic approaches. Previous research has found that CBT, psychodynamic therapy and family therapy can be effective in the treatment of SAD (Hunger-Schoppe et al., 2022; Leichsenring et al., 2013; Salzer et al., 2018) and ED (Abbate-Daga et al., 2016; Couturier et al., 2013; Linardon et al., 2017; Monteleone et al., 2022) alone, however, the present literature does not allow for an understanding of the mechanisms of therapy that could account for this concurrent decrease in symptom presentation.

Study quality

Most of the research included in this study was of high-quality (14/17 studies) which is helpful for interpretation and indicative of rigorous research being completed in this area. The quality of the included studies also increases confidence in the conclusions drawn in this review, particularly as most of the papers scored highly for their results sections from which a lot of the information included in this review was drawn from. Many of the papers also reported their analysis well and used appropriate analytic methods which was helpful in bringing together evidence from multiple papers. However, there were consistent concerns regarding controlling for confounders, which might impact the observed associations between SA and ED, particularly as one of the few studies that did control for confounders, found that controlling for depression diminished the relationship between ED and SA. It could be that the observed

associations between SA and ED in this study are inflated and obscured by other psychopathology.

There were also consistent weakness in some of the methodological aspects of the included studies. Many papers only received partial score for their sample size, with several studies recruiting very small groups which may have limited their ability to detect rates of SA and ED.

The use of different SA measures made direct comparisons across studies more difficult and may partly explain the wide variation in reported rates of SA and ED. Further, the inconsistent use of standardised ED outcome measures and the use of invalidated measure in one of the studies may impact the reliability of the findings.

Incomplete reporting of sample characteristics, particularly regarding ethnicity and cultural background may also restrict the generalisability of the evidence base. ED in particular, has been shown to be especially common in western cultures (Qian et al., 2021), although evidence shows increased rates in non-western cultures (Soh & Walter, 2012). However, as the majority of studies (14/17) were conducted in Western countries and reporting of ethnicity and culture was so poorly reported across studies it makes it difficult to understand whether findings apply beyond predominately western, white samples.

Overall, while the predominance of high-quality studies supports confidence in the broader conclusions of this review, the weaknesses observed suggest that

some caution should be taken when interpreting these findings. Future research should include larger samples, use reliable measures, consider confounders and be more clearly reported to ensure better reliability and generalisability of the evidence base as a whole.

Strengths and Limitations

The present study followed a comprehensive process, which involved an extensive, systematic search across multiple databases. 2,900 titles were evaluated, and a second rater ensured inter-rater reliability and that all relevant papers were appropriately included. This study also looked specifically at one developmental period rather than a lifespan, which has not been done in previous reviews. This is particularly important for as both SAD and ED difficulties are most likely to initially present during this period (Rapee et al., 2019).

Limitations of this review should also be acknowledged. The heterogeneity of settings of the included studies must be considered. The current review included samples from multiple different education settings, mental and physical health services, as well as including population-based samples. All of the studies included a clinical sample of ED; however, diagnosis was made in different ways with some having previously clinically diagnosed EDs and some meeting DSM-V criteria or clinical cut offs for EDs on different measures during the study. One study in particular used an unvalidated measure to confirm ED in the sample (Mohammadi et al., 2020). Similarly, a number of different measures

were used across studies for SA, with one paper highlighting differences in outcomes on two measures in the same study. This might suggest that certain measure may be more sensitive to specific aspects of SA making comparison difficult. Overall, the severity of ED and SA symptoms varied widely, with large standard deviations in some samples making it difficult to draw conclusions. There was also limited number of studies focused exclusively on children and young people, with some paper excluded due to a lack of extractable age-specific data from lifespan samples.

Clinical Implications

Clinically the review might be helpful for supporting adolescent and young adult ED patients who are presenting with SA. As far as we are aware this is the first review of its kind to consider this specific population despite both conditions being regularly seen together and initial presentation of both usually occurring during this time.

One interesting finding was that clinicians did not diagnose a single ED patient with SAD despite individuals meeting clinical thresholds during structured interviews (Schulze et al., 2009). The diagnostic interview used (Diagnostic Interview for Psychoses; DIPS) is well accepted for diagnostic purposes (Suppiger et al., 2009). Unstructured methods of diagnostic interview have previously been found to be less accurate than structured methods (Miller et al., 2001). EDs often have physical implications which need immediate attention and might result in clinician attention being directed towards the issue which

presents the most risk. However comorbidity of psychiatric disorders has been linked with increasing severity of ED symptoms (Spindler & Milos, 2007).

Directions for future research

The present study provides preliminary findings into the relationship between SA symptoms and ED in children and young people. There were limited papers focusing on this population. Furthermore, some papers including information regarding children and young people had to be excluded during the screening process as the data for those between 10 and 24 was not extractable. Following on from this study there is a clear need for future studies to focus on this population or if this population is included to ensure data is extractable for this age group or considered in the analysis.

While this study adopts an inclusive definition of young people as between the ages of 10-24 in line with contemporary literature, this period of development includes significant transitions biologically, socially and psychologically. It may be more beneficial to look more specifically at specific developmental periods (e.g. early adolescence, late adolescence and young adulthood) in future reviews. However, the paucity in literature for the overall sample would not allow for this at present, as such further work should consider presentations of SA and ED within different age groups.

One of the aims of this study was to understand the common symptoms, maintenance or vulnerability factors between SA and ED, particularly within a

cognitive-behavioural model. However, there was an absence of evidence about the cognitive and behavioural factors in the included studies. This is an area that should be considered for future research as these potential overlaps may offer insight into the co-occurrence of SA and ED and also inform more integrated and effected approaches to treatment.

Further, in three of the included studies SA consistently decreased across treatment modalities (i.e. psychodynamic, family-based therapy and CBT) targeting ED specifically. This highlights the importance of understanding what mechanisms within ED treatment are driving change in SA symptoms. These findings could suggest that there may be therapeutic components which are shared change processes. If research could identify *how* ED treatments are impacting SA symptoms, more targeted approaches that address this common co-morbidity could be designed.

Conclusion

The evidence further supports previous research looking at lifespan ED and SA, highlighting the complex reciprocal nature between them. Our findings suggest that SA frequently precedes the development of an ED. These findings highlight the need for early identification and treatment approaches that target both SA and ED symptoms during this developmental period. The present research specifically into this age group is limited, despite both SAD and ED often developing in adolescence and young adulthood. Future research should prioritise investigating the development of both and the shared causal and

maintaining pathways to facilitate better treatment and outcomes for young people affected by both conditions.

References

Abbate-Daga, G., Marzola, E., Amianto, F., & Fassino, S. (2016). A comprehensive review of psychodynamic treatments for eating disorders. *Eating and Weight Disorders - Studies on Anorexia, Bulimia and Obesity*, *21*(4), 553-580. https://doi.org/10.1007/s40519-016-0265-9

Alcaraz-Ibáñez, M., Paterna, A., & Griffiths, M. D. (2023). Social physical anxiety and eating disorders: A systematic review and meta-analysis. *Body Image*, *45*, 133-141. https://doi.org/https://doi.org/10.1016/j.bodyim.2023.02.008

American Psychiatric Association. (1980). *Diagnostic and Statistical Manual of Mental Disorders (3rd ed.)*.

American Psychiatric Association. (1987). *Diagnostic and Statistical Manual of Mental Disorders (3rd ed., rev.)*.

American Psychiatric Association. (1994). *Diagnostic and Statistical Manual of Mental Disorders (4th ed.)*.

American Psychiatric Association. (1997). *Diagnostic and Statistical Manual of Mental Disorders (4th ed., text rev.)*.

American Psychiatric Association. (2013). American Psychiatric Association. (2013). Diagnostic and Statistical Manual of Mental Disorders (5th ed.). https://doi.org/10.1176/appi.books.9780890425596

Asselmann, E., Wittchen, H. U., Lieb, R., & Beesdo-Baum, K. (2018). Sociodemographic, clinical, and functional long-term outcomes in adolescents and young adults with mental disorders. *Acta Psychiatrica Scandinavica*, *137*(1), 6-17. https://doi.org/10.1111/acps.12792

Baethge, C., Goldbeck-Wood, S., & Mertens, S. (2019). SANRA—a scale for the quality assessment of narrative review articles. *Research integrity and peer review*, *4*(1), 1-7. https://doi.org/https://doi.org/10.1186/s41073-019-0064-8

Beesdo, K., Pine, D. S., Lieb, R., & Wittchen, H.-U. (2010). Incidence and risk patterns of anxiety and depressive disorders and categorization of generalized anxiety disorder. *Archives of general psychiatry*, *67*(1), 47-57. https://doi.org/10.1001/archgenpsychiatry.2009.177

Beidel, D. C., Turner, S. M., & Morris, T. L. (1995). A new inventory to assess childhood social anxiety and phobia: The Social Phobia and Anxiety Inventory for Children. 73-79. https://doi.org/10.1037/1040-3590.7.1.73

Brosof, L. C., Calebs, B. J., & Levinson, C. A. (2019). Ethnic variance between Asian and European American women in a six month prospective model of eating disorder and social anxiety symptom comorbidity. *Eating Disorders*, *27*(2), 110-122. https://doi.org/10.1080/10640266.2019.1585678

Buchholz, A., Henderson, K. A., Hounsell, A., Wagner, A., Norris, M., & Spettigue, W. (2007). Self-silencing in a clinical sample of female adolescents with eating disorders. *Journal of the Canadian Academy of Child and Adolescent Psychiatry*, *16*(4), 158-163.

Buckner, J. D., Silgado, J., & Lewinsohn, P. M. (2010). Delineation of differential temporal relations between specific eating and anxiety disorders. *Journal of Psychiatric Research*, *44*(12), 781-787. https://doi.org/https://doi.org/10.1016/j.jpsychires.2010.01.014

Cance, J. D., Loukas, A., & Talley, A. E. (2015). The differential associations of internalizing symptoms and family and school relationships with disordered eating attitudes among early adolescents. *Journal of Social and Personal Relationships*, *32*(1), 41-56. https://doi.org/10.1177/0265407514523551

Carter, J. C., Stewart, D. A., & Fairburn, C. G. (2001). Eating disorder examination questionnaire: norms for young adolescent girls. *Behaviour research and therapy*, *39*(5), 625-632. https://doi.org/https://doi.org/10.1016/S0005-7967(00)00033-4

Clark, D. M., Crozier, W., & Alden, L. (2005). A cognitive perspective on social phobia. In W. R. C. L. E. Alden (Ed.), *The essential handbook of social anxiety for clinicians* (pp. 193-218). John Wiley & Sons Ltd.

Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and psychological measurement*, *20*(1), 37-46. https://doi.org/https://doi.org/10.1177/001316446002000104

Courty, A., Godart, N., Lalanne, C., & Berthoz, S. (2015). Alexithymia, a compounding factor for eating and social avoidance symptoms in anorexia nervosa. *Comprehensive Psychiatry*, *56*, 217-228. https://doi.org/https://doi.org/10.1016/j.comppsych.2014.09.011

Couturier, J., Kimber, M., & Szatmari, P. (2013). Efficacy of family-based treatment for adolescents with eating disorders: A systematic review and meta-analysis. *International Journal of Eating Disorders*, *46*(1), 3-11. https://doi.org/https://doi.org/10.1002/eat.22042

Dakanalis, A., Carrà, G., Calogero, R., Zanetti, M. A., Volpato, C., Riva, G., Clerici, M., & Cipresso, P. (2016). The Social Appearance Anxiety Scale

in Italian Adolescent Populations: Construct Validation and Group Discrimination in Community and Clinical Eating Disorders Samples. *Child psychiatry and human development*, *47*(1), 133-150. https://doi.org/10.1007/s10578-015-0551-1

DeBoer, L. B., Medina, J. L., Davis, M. L., Presnell, K. E., Powers, M. B., & Smits, J. A. (2013). Associations between fear of negative evaluation and eating pathology during intervention and 12-month follow-up. *Cognitive Therapy and Research*, *37*, 941-952. https://doi.org/10.1007/s10608-013-9547-y

Delaquis, C. P., Godart, N. T., Group, E., Fatséas, M., & Berthoz, S. (2023). Cognitive and Interpersonal Factors in Adolescent Inpatients with Anorexia Nervosa: A Network Analysis. *Children*, *10*(4), 730. https://doi.org/10.3390/children10040730

Duclos, J., Dorard, G., Berthoz, S., Curt, F., Faucher, S., Falissard, B., & Godart, N. (2014). Expressed emotion in anorexia nervosa: what is inside the "black box"? *Comprehensive Psychiatry*, *55*(1), 71-79. https://doi.org/10.1016/j.comppsych.2013.10.002

Fairburn, C. G., & Beglin, S. J. (1994). Assessment of eating disorders: Interview or self-report questionnaire? *International Journal of Eating Disorders*, *16*(4), 363-370. https://doi.org/https://doi.org/10.1002/1098-108X(199412)16:4<363::AID-EAT2260160405>3.0.CO;2-#

Favaro, A., Busetto, P., Collantoni, E., & Santonastaso, P. (2019). The age of onset of eating disorders. In P. D. M. G. DeGirolamo, N. Sartorius (Ed.), *Age of onset of mental disorders: Etiopathogenetic and treatment implications* (pp. 203-216). Springer.

First, M. B., Spitzer, R. L., Gibbon, M., Williams, J. B. W. (1997). *Structured Clinical Interview for DSM-IV Axis I Disorders – Clinician Version (SCID-CV).* American Psychiatric Press.

Forbush, K. T., Chen, P. Y., Hagan, K. E., Chapa, D. A. N., Gould, S. R., Eaton, N. R., & Krueger, R. F. (2018). A new approach to eating-disorder classification: Using empirical methods to delineate diagnostic dimensions and inform care [Article]. *International Journal of Eating Disorders*, *51*(7), 710-721. https://doi.org/10.1002/eat.22891

Garcia, S. C., Mikhail, M. E., Keel, P. K., Burt, S. A., Neale, M. C., Boker, S., & Klump, K. L. (2020). Increased rates of eating disorders and their symptoms in women with major depressive disorder and anxiety disorders. *International Journal of Eating Disorders*, *53*(11), 1844-1854. https://doi.org/10.1002/eat.23366

Garner, D. (1991). *Eating Disorder Inventory 2: Professional manual*. Psychological Assessment Resources.

Garner, D. M., Olmstead, M. P., & Polivy, J. (1983). Development and validation of a multidimensional eating disorder inventory for anorexia nervosa and bulimia [Article]. *International Journal of Eating Disorders*, *2*(2), 15-34. https://doi.org/10.1002/1098-108X(198321)2:2<15::AID-EAT2260020203>3.0.CO;2-6

Garner, D. M., Olmsted, M. P., Bohr, Y., & Garfinkel, P. E. (1982). The eating attitudes test: psychometric features and clinical correlates. *Psychological Medicine*, *12*(4), 871-878. https://doi.org/10.1017/s0033291700049163

Godart, N. T., Flament, M. F., Lecrubier, Y., & Jeammet, P. (2000). Anxiety disorders in anorexia nervosa and bulimia nervosa: co-morbidity and chronology of appearance. *European Psychiatry*, *15*(1), 38-45. https://doi.org/10.1016/s0924-9338(00)00212-1

Goddard, E., & Treasure, J. (2013). Anxiety and social-emotional processing in eating disorders: examination of family trios. *Cognitive Therapy and Research*, *37*, 890-904. https://doi.org/https://doi.org/10.1007/s10608-013-9535-2

Goodwin, R. D., & Fitzgibbon, M. L. (2002). Social anxiety as a barrier to treatment for eating disorders. *International Journal of Eating Disorders*, *32*(1), 103-106. https://doi.org/https://doi.org/10.1002/eat.10051

Gross, J., & Rosen, J. C. (1988). Bulimia in adolescents: Prevalence and psychosocial correlates. *International Journal of Eating Disorders*, *7*(1), 51-61. https://doi.org/https://doi.org/10.1002/1098-108X(198801)7:1<51::AID-EAT2260070106>3.0.CO;2-Q

Harrison, A., Kerr-Gaffney, J., & Tchanturia, K. (2018). Social anxiety in the eating disorders: a systematic review and meta-analysis. *Psychological Medicine*, *48*(15), 2477-2491. https://doi.org/10.1017/S0033291718000752

Heimberg, R. G., Brozovich, F. A., & Rapee, R. M. (2014). Chapter 24 - A Cognitive-Behavioral Model of Social Anxiety Disorder. In S. G. Hofmann & P. M. DiBartolo (Eds.), *Social Anxiety (Third Edition)* (pp. 705-728). Academic Press. https://doi.org/https://doi.org/10.1016/B978-0-12-394427-6.00024-8

Ho, P. L., Erceg-Hurn, D. M., McEvoy, P. M., Campbell, B. N. C., Mathersul, D. C., Correia, H. M., & Raykos, B. C. (2024). Examining co-occurring social anxiety in cognitive behavioral therapy for eating disorders: Does it change and does it moderate eating disorder outcomes? *International Journal of Eating Disorders*, *57*(8), 1776-1782. https://doi.org/https://doi.org/10.1002/eat.24191

Hunger-Schoppe, C., Schweitzer, J., Hilzinger, R., Krempel, L., Deußer, L., Sander, A., Bents, H., Mander, J., & Lieb, H. (2022). Integrative systemic and family therapy for social anxiety disorder: Manual and practice in a pilot randomized controlled trial (SOPHO-CBT/ST). *Frontiers in Psychology 13*, 867246. https://doi.org/10.3389/fpsyg.2022.867246

Jin, Y., Xu, S., Chen, C., Wilson, A., Gao, D., Ji, Y., Sun, X., & Wang, Y. (2022). Symptom association between social anxiety disorder, appearance anxiety, and eating disorders among Chinese University students: A network analysis to conceptualize comorbidity [Original Research]. *Frontiers in Public Health*, *Volume 10 - 2022*. https://doi.org/10.3389/fpubh.2022.1044081

Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of general psychiatry*, *62*(6), 593-602. https://doi.org/https://doi.org/10.1001/archpsyc.62.6.593

Kmet, L. M., Cook, L. S., & Lee, R. C. (2004). Standard quality assessment criteria for evaluating primary research papers from a variety of fields.

Krug, I., Dang, A. B., & Hughes, E. K. (2024). There is nothing as inconsistent as the OSFED diagnostic criteria. *Trends in Molecular Medicine*, *30*(4), 403-415. https://doi.org/https://doi.org/10.1016/j.molmed.2024.01.006

Leary, M. R. (1983). A Brief Version of the Fear of Negative Evaluation Scale. *Personality and Social Psychology Bulletin*, *9*(3), 371-375. https://doi.org/10.1177/0146167283093007

Leichsenring, F., Salzer, S., Beutel, M. E., Herpertz, S., Hiller, W., Hoyer, J., Huesing, J., Joraschky, P., Nolting, B., Poehlmann, K., Ritter, V., Stangier, U., Strauss, B., Stuhldreher, N., Tefikow, S., Teismann, T., Willutzki, U., Wiltink, J., & Leibing, E. (2013). Psychodynamic Therapy and Cognitive-Behavioral Therapy in Social Anxiety Disorder: A Multicenter Randomized Controlled Trial. *American Journal of Psychiatry*, *170*(7), 759-767. https://doi.org/10.1176/appi.ajp.2013.12081125

Levinson, C. A., Brosof, L. C., Vanzhula, I., Christian, C., Jones, P., Rodebaugh, T. L., Langer, J. K., White, E. K., Warren, C., & Weeks, J. W. (2018). Social anxiety and eating disorder comorbidity and underlying vulnerabilities: Using network analysis to conceptualize comorbidity. *International Journal of Eating Disorders*, *51*(7), 693-709. https://doi.org/10.1002/eat.22890

Levinson, C. A., Rapp, J., & Riley, E. N. (2014). Addressing the fear of fat: Extending imaginal exposure therapy for anxiety disorders to anorexia nervosa. *Eating and Weight Disorders-Studies on Anorexia, Bulimia and Obesity*, *19*, 521-524. https://doi.org/10.1016/j.eatbeh.2011.11.006

Levinson, C. A., & Rodebaugh, T. L. (2012). Social anxiety and eating disorder comorbidity: The role of negative social evaluation fears. *Eating behaviors*, *13*(1), 27-35. https://doi.org/10.1016/j.eatbeh.2011.11.006

Levinson, C. A., & Rodebaugh, T. L. (2016). Clarifying the prospective relationships between social anxiety and eating disorder symptoms and underlying vulnerabilities. *Appetite*, *107*, 38-46. https://doi.org/https://dx.doi.org/10.1016/j.appet.2016.07.024

Levinson, C. A., Rodebaugh, T. L., White, E. K., Menatti, A. R., Weeks, J. W., Iacovino, J. M., & Warren, C. S. (2013). Social appearance anxiety, perfectionism, and fear of negative evaluation. Distinct or shared risk factors for social anxiety and eating disorders? *Appetite*, *67*, 125-133. https://doi.org/https://doi.org/10.1016/j.appet.2013.04.002

Levinson, C. A., Zerwas, S. C., Brosof, L. C., Thornton, L. M., Strober, M., Pivarunas, B., Crowley, J. J., Yilmaz, Z., Berrettini, W. H., & Brandt, H. (2019). Associations between dimensions of anorexia nervosa and obsessive–compulsive disorder: An examination of personality and psychological factors in patients with anorexia nervosa. *European Eating Disorders Review*, *27*(2), 161-172. https://doi.org/https://doi.org/10.1002/erv.2635

Liebowitz, M. R. (1987). Social phobia. *Modern problems of pharmacopsychiatry*, *22*(141), e173. https://doi.org/https://psycnet.apa.org/doi/10.1159/000414022

Linardon, J., Wade, T. D., de la Piedad Garcia, X., & Brennan, L. (2017). The efficacy of cognitive-behavioral therapy for eating disorders: A systematic

review and meta-analysis. *85*, 1080-1094. https://doi.org/10.1037/ccp0000245

March, J., Conners, C., Arnold, G., Epstein, J., Parker, J., Hinshaw, S., Abikoff, H., Molina, B., Wells, K., & Newcorn, J. (1999). The Multidimensional Anxiety Scale for Children (MASC): Confirmatory factor analysis in a pediatric ADHD sample. *Journal of Attention Disorders*, *3*(2), 85-89. https://doi.org/https://psycnet.apa.org/doi/10.1177/108705479900300202

Mares, S. H. W., Burger, J., Lemmens, L. H. J. M., van Elburg, A. A., & Vroling, M. S. (2022). Evaluation of the cognitive behavioural theory of eating disorders: A network analysis investigation. *Eating behaviors*, *44*, 101590. https://doi.org/https://doi.org/10.1016/j.eatbeh.2021.101590

Mattar, L., Thiébaud, M.-R., Huas, C., Cebula, C., & Godart, N. (2012). Depression, anxiety and obsessive–compulsive symptoms in relation to nutritional status and outcome in severe anorexia nervosa. *Psychiatry Research*, *200*(2), 513-517. https://doi.org/https://doi.org/10.1016/j.psychres.2012.04.032

Mattick, R. P., & Clarke, J. C. (1998). Development and validation of measures of social phobia scrutiny fear and social interaction anxiety. *Behaviour research and therapy*, *36*(4), 455-470. https://doi.org/10.1016/s0005-7967(97)10031-6

Miller, P. R., Dasher, R., Collins, R., Griffiths, P., & Brown, F. (2001). Inpatient diagnostic assessments: 1. Accuracy of structured vs. unstructured interviews. *Psychiatry Research*, *105*(3), 255-264. https://doi.org/https://doi.org/10.1016/S0165-1781(01)00317-1

Mohamadirizi, S., Yousefi, F., & Boroumandfar, Z. (2014). The Relationship between Eating Disorder Symptoms and Social Anxiety Disorder in Students in Isfahan. *Journal of Pediatric Perspectives*, *2*(4.2), 47-53. https://doi.org/10.22038/ijp.2014.3481

Mohammadi, M. R., Salehi, M., Khaleghi, A., Hooshyari, Z., Mostafavi, S. A., Ahmadi, N., Hojjat, S. K., Safavi, P., & Amanat, M. (2020). Social anxiety disorder among children and adolescents: A nationwide survey of prevalence, socio-demographic characteristics, risk factors and co-morbidities. *Journal of Affective Disorders*, *263*, 450-457. https://doi.org/https://doi.org/10.1016/j.jad.2019.12.015

Monteleone, A., Pellegrino, F., Croatto, G., Carfagno, M., Hilbert, A., Treasure, J., Wade, T., Bulik, C., Zipfel, S., Hay, P., Schmidt, U., Castellini, G., Favaro, A., Fernandez-Aranda, F., Il Shin, J., Voderholzer, U., Ricca, V., Moretti, D., Busatta, D., . . . Solmi, M. (2022). Treatment of eating disorders: A systematic meta-review of meta-analyses and network meta-analyses. *Neuroscience & Biobehavioral Reviews*, *142*, 104857. https://doi.org/https://doi.org/10.1016/j.neubiorev.2022.104857

National Institute of Mental Health. (2025). *Eating Disorders* https://www.nimh.nih.gov/health/topics/eating-disorders

NICE. (2013). *Social anxiety disorder: recognition, assessment and treatment: CG159*. National Institute for Health

Care Excellence. https://www.nice.org.uk/guidance/cg159/chapter/Recommendations#identification-and-assessment-of-children-and-young-people

NICE. (2017). *Eating disorders: recognition and treatment NICE guideline: NG69*. National Institute for Health Care Excellence. https://www.nice.org.uk/guidance/ng69/evidence

Obeid, N., Buchholz, A., Boerner, K. E., Henderson, K. A., & and Norris, M. (2013). Self-Esteem and Social Anxiety in an Adolescent Female Eating Disorder Population: Age and Diagnostic Effects. *Eating Disorders*, *21*(2), 140-153. https://doi.org/10.1080/10640266.2013.761088

Ohmann, S., Popow, C., Wurzer, M., Karwautz, A., Sackl-Pammer, P., & Schuch, B. (2013). Emotional aspects of anorexia nervosa: results of prospective naturalistic cognitive behavioral group therapy. *neuropsychiatrie*, *27*(3), 119-128. https://doi.org/10.1007/s40211-013-0065-7

Ouzzani, M., Hammady, H., Fedorowicz, Z., & Elmagarmid, A. (2016). Rayyan—a web and mobile app for systematic reviews. *Systematic Reviews*, *5*(1), 210. https://doi.org/10.1186/s13643-016-0384-4

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., & Brennan, S. E. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *British Medical Journal*, *372*.

Pearson, A., White, H., Bath-Hextall, F., Salmond, S., Apostolo, J., & Kirkpatrick, P. (2015). A mixed-methods approach to systematic reviews. *JBI Evidence Implementation*, *13*(3). https://journals.lww.com/ijebh/fulltext/2015/09000/a_mixed_methods_approach_to_systematic_reviews.3.aspx

Pike, K. M., Claudino, D. A., & Claudino, A. M. (2023). The Classification of Feeding or Eating Disorders in the ICD-11. In P. Robinson, T. Wade, B. Herpertz-Dahlmann, F. Fernandez-Aranda, J. Treasure, & S. Wonderlich (Eds.), *Eating Disorders: An International Comprehensive View* (pp. 1-21). Springer International Publishing. https://doi.org/10.1007/978-3-030-97416-9_10-1

Ranta, K., Väänänen, J., Fröjd, S., Isomaa, R., Kaltiala-Heino, R., & Marttunen, M. (2017). Social phobia, depression and eating disorders during middle adolescence: longitudinal associations and treatment seeking. *Nordic Journal of Psychiatry*, *71*(8), 605-613. https://doi.org/10.1080/08039488.2017.1366548

Rapee, R. M., Oar, E. L., Johnco, C. J., Forbes, M. K., Fardouly, J., Magson, N. R., & Richardson, C. E. (2019). Adolescent development and risk for the onset of social-emotional disorders: A review and conceptual model. *Behaviour Research and Therapy 123*, 103501. https://doi.org/https://doi.org/10.1016/j.brat.2019.103501

Salzer, S., Stefini, A., Kronmüller, K.-T., Leibing, E., Leichsenring, F., Henningsen, P., Peseschkian, H., Reich, G., Rosner, R., Ruhl, U., Schopf, Y., Steinert, C., Vonderlin, E., & Steil, R. (2018). Cognitive-Behavioral and Psychodynamic Therapy in Adolescents with Social Anxiety Disorder: A Multicenter Randomized Controlled Trial. *Psychotherapy and Psychosomatics*, *87*(4), 223-233. https://doi.org/10.1159/000488990

Sareen, L., & Stein, M. (2000). A review of the epidemiology and approaches to the treatment of social anxiety disorder. *Drugs*, *59*(3), 497-509. https://doi.org/10.2165/00003495-200059030-00007

Sawaoka, T., Barnes, R. D., Blomquist, K. K., Masheb, R. M., & Grilo, C. M. (2012). Social anxiety and self-consciousness in binge eating disorder: associations with eating disorder psychopathology. *Comprehensive Psychiatry*, *53*(6), 740-745. https://doi.org/https://doi.org/10.1016/j.comppsych.2011.10.003

Sawyer, S. M., Azzopardi, P. S., Wickremarathne, D., & Patton, G. C. (2018). The age of adolescence. *The Lancet Child & Adolescent Health*, *2*(3), 223-228. https://doi.org/10.1016/S2352-4642(18)30022-1

Schneier, F., & Goldmark, J. (2015). Social anxiety disorder. In D. J. S. B. Vythilingum (Ed.), *Anxiety disorders and gender* (pp. 49-67). Springer International Publishing/Springer Nature. https://doi.org/https://psycnet.apa.org/doi/10.1007/978-3-319-13060-6_3

Schulze, U. M. E., Calame, S., Keller, F., & Mehler-Wex, C. (2009). Trait anxiety in children and adolescents with anorexia nervosa. *Eating and Weight Disorders - Studies on Anorexia, Bulimia and Obesity*, *14*(2), e163-e168. https://doi.org/10.1007/BF03327817

Shafran, R., Cooper, Z., & Fairburn, C. G. (2002). Clinical perfectionism: A cognitive–behavioural analysis. *Behaviour research and therapy*, *40*(7), 773-791. https://doi.org/https://doi.org/10.1016/s0005-7967(01)00059-6

Siddaway, A. P., Wood, A. M., & Hedges, L. V. (2019). How to do a systematic review: a best practice guide for conducting and reporting narrative reviews, meta-analyses, and meta-syntheses. *Annual review of*

psychology, *70*(1), 747-770. https://doi.org/https://doi.org/10.1146/annurev-psych-010418-102803

Solmi, M., Monaco, F., Højlund, M., Monteleone, A. M., Trott, M., Firth, J., Carfagno, M., Eaton, M., De Toffol, M., Vergine, M., Meneguzzo, P., Collantoni, E., Gallicchio, D., Stubbs, B., Girardi, A., Busetto, P., Favaro, A., Carvalho, A. F., Steinhausen, H.-C., & Correll, C. U. (2024). Outcomes in people with eating disorders: a transdiagnostic and disorder-specific systematic review, meta-analysis and multivariable meta-regression analysis. *World Psychiatry*, *23*(1), 124-138. https://doi.org/https://doi.org/10.1002/wps.21182

Spettigue, W., Obeid, N., Santos, A., Norris, M., Hamati, R., Hadjiyannakis, S., & Buchholz, A. (2020). Binge eating and social anxiety in treatment-seeking adolescents with eating disorders or severe obesity. *Eating and Weight Disorders*, *25*(3), 787-793. https://doi.org/10.1007/s40519-019-00689-6

Spindler, A., & Milos, G. (2007). Links between eating disorder symptom severity and psychiatric comorbidity. *Eating behaviors*, *8*(3), 364-373. https://doi.org/https://doi.org/10.1016/j.eatbeh.2006.11.012

Suppiger, A., In-Albon, T., Hendriksen, S., Hermann, E., Margraf, J., & Schneider, S. (2009). Acceptance of Structured Diagnostic Interviews for Mental Disorders in Clinical Practice and Research Settings. *Behavior Therapy*, *40*(3), 272-279. https://doi.org/https://doi.org/10.1016/j.beth.2008.07.002

Swinbourne, J. M. (2008). *The comorbidity between eating disorders and anxiety disorders.* University of Sydney].

Treasure, J., Hübel, C., & Himmerich, H. (2022). The evolving epidemiology and differential etiopathogenesis of eating disorders: implications for prevention and treatment. *World Psychiatry*, *21*(1), 147. https://doi.org/https://doi.org/10.1002/wps.20935

Treasure, J., Willmott, D., Ambwani, S., Cardi, V., Clark Bryan, D., Rowlands, K., & Schmidt, U. (2020). Cognitive Interpersonal Model for Anorexia Nervosa Revisited: The Perpetuating Factors that Contribute to the Development of the Severe and Enduring Illness. *Journal of Clinical Medicine*, *9*(3). https://doi.org/10.3390/jcm9030630

Trompeter, N., Dârvariu, Ș., Brieva-Toloza, A. V., Opitz, M.-C., Rabelo-da-Ponte, F. D., Sharpe, H., Desrivieres, S., Schmidt, U., & Micali, N. (2024). The prospective relationship between anxiety symptoms and eating disorder symptoms among adolescents: a systematic review and meta-analysis of a bi-directional relationship. *European Child & Adolescent Psychiatry*. https://doi.org/10.1007/s00787-024-02601-9

Turner, S., Beidel, D., Dancu, C., & Stanley, M. (1989). An Empirically Derived Inventory to Measure Social Fears and Anxiety: The Social Phobia and Anxiety Inventory. *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, *1*, 35-40. https://doi.org/10.1037/1040-3590.1.1.35

Vardar, E., & Erzengin, M. (2011). The prevalence of eating disorders (EDs) and comorbid psychiatric disorders in adolescents: a two-stage community-based study. *Turkish Journal of Psychiatry*, *22*(4), 205-212.

Watson, D., & Friend, R. (1969). Measurement of social-evaluative anxiety. *Journal of Consulting and Clinical Psychology*, *33*(4), 448. https://doi.org/https://psycnet.apa.org/doi/10.1037/h0027806

World Health Organization. (1992). *The ICD-10 classification of mental and behavioural disorders: Clinical descriptions and diagnostic guidelines*. World Health Organization.

Zonnevylle-Bender, M. J. S., van Goozen, S. H. M., Cohen-Kettenis, P. T., van Elburg, A., de Wildt, M., Stevelmans, E., & van Engeland, H. (2004). Emotional functioning in anorexia nervosa patients: Adolescents compared to adults. *Depression and Anxiety*, *19*(1), 35-42. https://doi.org/https://doi.org/10.1002/da.10145

Service Improvement Project

Parent's Psychological Preparedness for Infant's Primary Cleft Lip and/or Palate Surgery.

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Proposed Journal: This report is intended for submission for *Cleft Palate Craniofacial Journal* and has been prepared in accordance with their guidelines (Appendix G). This is a leading journal focused on research, clinical care and psychosocial aspects of cleft and craniofacial conditions. Similar studies have been published in this journal, and it reaches the multidisciplinary audience this study is relevant to.

Abstract

Objective: Parents of children with cleft lip and/or palate (CL/P) can often find the period surrounding primary repair surgery challenging. This study explored the experiences and psychological needs of parents of children undergoing their first repair surgery to inform service improvement recommendations.

Design: An audit of patient files was conducted to review psychology service provision to children who underwent their primary repair surgery in 2023. Semi-structured interviews with 10 families whose children underwent surgery in 2023 were analysed using thematic analysis.

Setting: Specialist cleft service.

Participants: Parents of children who had their primary surgery in 2023.

Results: Findings, reviewed in consultation with staff, identified three key themes: *accessing support at Spires*, *coping* and *emotional support needs*.

Conclusions: These findings informed recommendations to enhance psychological support within the team. Implementation and evaluation of these recommendations should be monitored.

Keywords: Cleft, primary repair surgery, parental preparedness, psychological preparedness

Introduction

Clefts of the lip and/or palate (CL/P) are common birth defects. Current global prevalence rates are thought to be 0.3 in 1000 live births for cleft lip (CL), 0.33 in 1000 live births for cleft palate (CP) and 0.45 in 1000 live births for cleft lip and palate (CLP)(Salari et al., 2022). CL/P can affect a variety of functions, including feeding, speech and hearing as well as having aesthetic consequences(Fitzsimons et al., 2012). Families require support from multidisciplinary teams from birth, and primary surgical repair is typically performed before a baby is 14 months old(Brichacek & Matic, 2021; Fitzsimons et al., 2012). The NHS 20-year care pathway indicates that those born with a cleft will often require ongoing treatment to address their functional and appearance related needs following primary surgery(NHS, 2013).

Parental Experience

Parents report emotions such as shock, guilt, anxiety and grief following diagnosis of CL/P(Nelson et al., 2012). Parents who receive a postnatal diagnosis may have more difficulty adjusting than those informed prenatally(Stock et al., 2024). Parental concerns include feeding difficulties, people's reactions, and conflicting emotions regarding the diagnosis(Brichacek & Matic, 2021; Nelson et al., 2012; Stock, Costa, et al., 2020). Overall, parents of children with CL/P experience greater psychological stress compared to parents of children without cleft(Lentge et al., 2022).

The time between diagnosis and primary lip repair can be stressful for parents, Boztepe et al. (2020) found that mothers of preoperative babies with CL/P experienced more parental stress than mothers of babies who had had their primary repair surgery. Parents report conflicting emotions consenting to surgical intervention and to their baby's change in appearance(Nelson et al., 2012).It has been suggested that parental wellbeing should be assessed as part of cleft treatment and that caregivers should have access to psychosocial support(Nelson et al., 2012; Stock et al., 2024).

Existing literature has highlighted the importance of healthcare delivery in reducing psychological distress among parents of children born with CL/P(Knapke et al., 2010; Vanz & Ribeiro, 2011) For both mothers and fathers, satisfaction with healthcare was linked with lower levels of depression, more positive perceptions of CL/P and reduced impact on families(Stock, Costa, et al., 2020). Specialist nurses have used informal counselling, information and surgical photos to ease parental anxiety and normalise concerns(Stock, Zucchelli, et al., 2020). Input from specialist clinical psychologist can reduce psychological stress(Lentge et al., 2022) and provide support regarding decisions on elective surgery and preparation for procedures(Hotton et al., 2023). Parents benefit from improved care co-ordination involving them in treatment planning, and informational resources(Stock et al., 2024).

Theoretical Basis

Hill (1958) ABC-X Model provides a valuable framework for understanding stress and coping within families. It has previously been used to explore mental health and quality of life of parental caregivers of children with medical and surgical needs(Boettcher et al., 2021; Joseph et al., 2014).

The model suggests that family outcomes (X) following the impact of a stressor or crisis (A) are the result of multiple factors (B,C) interacting with each other(Hill, 1958). Within this context, the diagnosis of CL/P and first repair surgery represent the stressor (A) which place demands on the family. The extent of stress experienced (X) is shaped by the family's resources for meeting these demands (B) and their perception of diagnosis and surgery (C).

Service Provision and Context

The NHS provides free, specialist CL/P care to all families at the point of access(NHS, 2013). The Spires Cleft Centre (SCC) is one of nine highly specialised cleft centres in England. They are a lifespan service supporting clients and their families from diagnosis. The multidisciplinary team include nursing, speech and language, surgical, dentistry, orthodontic, genetic and psychology professionals.

Service Improvement

Current national recommendations regarding cleft care state that "*every child should be able to function well socially and without disadvantage alongside aesthetic and functional outcomes*"(NHS, 2013). Further, all families should receive support from a clinical nurse specialist from diagnosis, and children and their families should be assessed for psychosocial concerns by a specialist clinical psychologist at least once before the child's sixth birthday(NHS, 2013).

Psychology team leads at the Oxford site of SCC identified potential gaps in the service, particularly following the impact of the COVID-19 pandemic, which saw a reduction in the scope of services offered to families. Screening calls at the time of diagnosis were discontinued, with referrals now received on a needs led basis from MDT colleagues. The present study was proposed to clarify present service provision and identify recommendations for service development specifically around the time of primary surgery.

Aims of the study

The current study aims to address the following questions:

- What is currently done by the psychology team to support the emotional wellbeing of parents/caregivers of babies under the care of the SCC before, during and after their child's first repair surgery? (Phase One)

- What are the parents/caregivers experience of psychological support within the team before/during and after primary repair? (Phase Two)
- What are parents' psychological needs and how can they be better supported before, during and after their child's first repair surgery?

Methods

Design

The study utilised a mixed methods, cross sectional design consisting of two phases. Phase one comprised of an audit of the psychological support accessed by families attending for initial repair surgery in 2023. During phase two, semi-structured interviews were carried out with parents of the same cohort.

Prior to completion, the proposed study was reviewed, and approval was granted, from the University of Oxford Institute of Clinical Psychology Training research team and the OUH Psychological Medicine Clinical Governance Group (Ref:8888). Following participatory research methods(Vaughn & Jacquez, 2020), an interview schedule (Appendix L) was prepared by the researchers and co-developed with three staff members and two parents of children who had attended the service for repair surgery in 2022.

Participants

Recruitment took place between September 2024 and March 2025. Eligible participants were parents/guardians of a child under the Oxford site of the SCC, born with a cleft lip and/or palate, whom had their first surgery in 2023.

Participants were excluded if they were transferred from another service after the child's birth, if the child had any co-occurring difficulties (e.g. medical or neurodevelopmental co-morbidities) or if the child was deceased.

Parents/caregivers were identified from the audit of the 2023 primary repair surgeries and contacted by members of the SCC team by phone (see appendix I). Participants were provided with an information sheet (appendix K) and a consent form (appendix J). Participants all provided verbal consent during the interviews.

Data Collection

Phase One

Information was audited via the electronic patient records and included contact with psychology before and after the primary surgery, number of contacts with psychology and methods of contact.

Phase Two

Semi-structured qualitative interviews were carried out following the interview schedule. The first author met with parents via Microsoft Teams or over the phone. Interviews lasted approximately one hour and were recorded with consent. The interviews were then transcribed using intelligent verbatim and anonymised before the data were analysed.

Data analysis

The information collected at phase one was summarised using descriptive statistics run through SPSS (Version 29). During phase two, anonymised interviews were uploaded to NVivo14. Thematic Analysis was performed independently by the first author, using the six phase model as defined by Braun and Clarke(Braun & Clarke, 2006) These phases included: data familiarisation, initial code generation, generating (initial) themes, theme review, theme defining and naming and report production. The remaining authors were consulted before and during the analysis. Author positionality was considered and summarised in Appendix M.

Results

Phase One

Phase One data collection was conducted in May 2024. Any psychology contact with a parent pertaining to diagnosis or primary surgery to May 2024 was included. Contact with psychology included check-in calls following a referral from other members of the MDT, psychological therapy sessions

(including phone, online and face to face sessions) or contact during a MDT review in which psychological wellbeing around primary surgery was discussed and noted. Descriptive statistics (Table 1) provide an overview of the patients seen by the SCC for primary repair surgery in 2023. Sixty children underwent surgery (10% lip, 65% palate, 25% lip and palate). The sample was balanced in terms of gender, with equal representation of males (30) and females (30). Mean age at surgery was 494.28 days (SD=473.20), with a wide range (56 to 2483 days), suggesting substantial variability in surgical timing.

Table 1. Descriptive statistics – Phase One

Cleft Type		**CL (n=6)**	**CP (n=39)**	**CLP (n=15)**	**All children N=60)**
Gender (n)	Female	n = 0	n = 24	n = 6	n = 30
	Male	n = 6	n = 15	n = 9	n = 30
Age at surgery (days) m (SD)		311.5 (196.10)	601 (521.79)	289.93 (316.47)	494.28 (473.20)
Ethnicity (n)	Other not stated	n = 2	n = 20	n = 5	n = 27
	White British	n = 3	n = 10	n = 8	n = 21
	Asian or British Asian	n = 0	n = 5	n = 1	n =6
	White – any other background	n = 1	n = 2	n = 0	n = 3
	Black or Black British	n = 0	n = 1	n = 1	n = 2
	Any other ethnicity	n = 0	n = 1	n = 0	n = 1

16 of the 60 eligible parents (26.7%) had contact with the psychology team up to May 2024, with total contacts ranging from 0 to 16 per birth (M=1.01, SD = 2.62), indicating that while some patients had multiple contacts with the psychology team, others had none (Figure 1). Contact frequency varied across different modalities, with phone contact being the most common (M= 0.53, SD=1.56), followed by face-to-face (M=0.33, SD=0.93) and online interactions (M=0.13, SD=0.70).

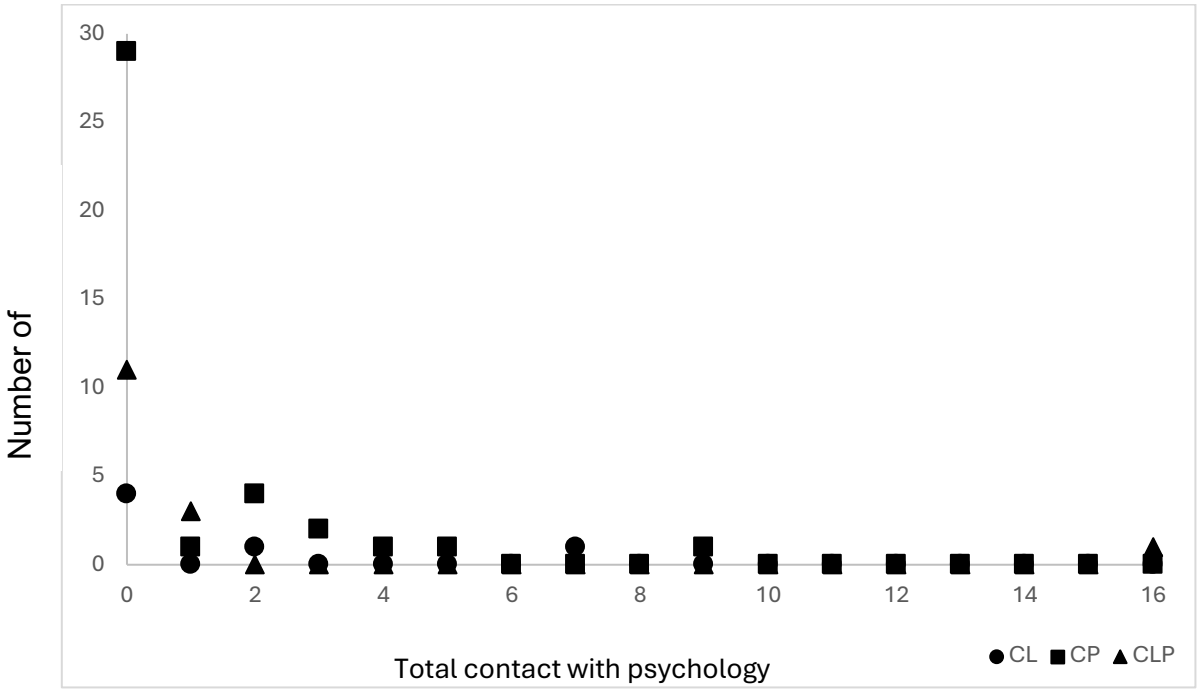

Figure 1. Number of contacts by cleft type

Antenatal contacts were infrequent (two parents) suggesting limited prenatal provision. However, inconsistencies identified in the data recording, due to records being held in the mothers file, may mean the actual number was

higher. The largest group of parents seen was CP (n=39), of whom 10 (25.6%) received psychological support. In the CLP group, 4 of 15 (26.7%) had contact with psychology. The smallest group, CL (n=6) had the highest proportion of contact with psychology (n=2, 33.3%).

Table 2. Contact with psychology by cleft type

Cleft Type		**CL (n=6)**	**CP (n=39)**	**CLP (n=15)**	**All children N=60)**
Seen by psychology (n)	Yes	n = 2	n =10	n =4	n =16
	No	n =4	n =29	n =11	n =44
% seen by psychology		33.3%	25.6%	26.7%	26.7%
Number sessions seen by psychology (M, SD)		1.5 (2.8)	.84 (1.84)	1.2 (1.05)	1.01 (2.62)

Phase Two

Ten families completed interviews including eight mothers, one father and one couple (mother and father). Demographics information of parents and their children are provided in Table 3.

Table 3. Demographic information for families and babies undergoing surgery

Participant Number	Diagnosis	Time of Diagnosis	Age at surgery	Contact with Psychology	Parent	Family history
1	Lip & Palate	20-week scan	6 months	Check in call during pregnancy	Mother	No
2	Lip & Palate	20-week scan	4 months	Not aware of psychology	Mother	No
3	Lip & Palate	20-week scan	3 months	Check in call during pregnancy	Mother	No
4	Palate	20-week scan	15 months	Check in call (unknown time point)	Mother	No
5	Palate	Birth (suggestion at scan)	Under 1	No memory of psychology contact	Father	Yes – older brother

6	Lip and Palate	20-week scan	4 months	Check in call during pregnancy	Mother	No
7	Palate	Birth	10 months	Potentially a check in call during pregnancy– unsure	Mother	No
8	Lip and Palate	20-week scan	6 months	1:1 psychology session during pregnancy and pre-primary surgery	Mother	No
9	Lip and Palate	20-week scan	6 months	Brief meeting at post-birth appointment	Mother and Father	No
10	Lip and Palate	20-week scan	4 months	1:1 psychology sessions during pregnancy, pre and post primary surgery.	Mother	Yes – paternal grandfather

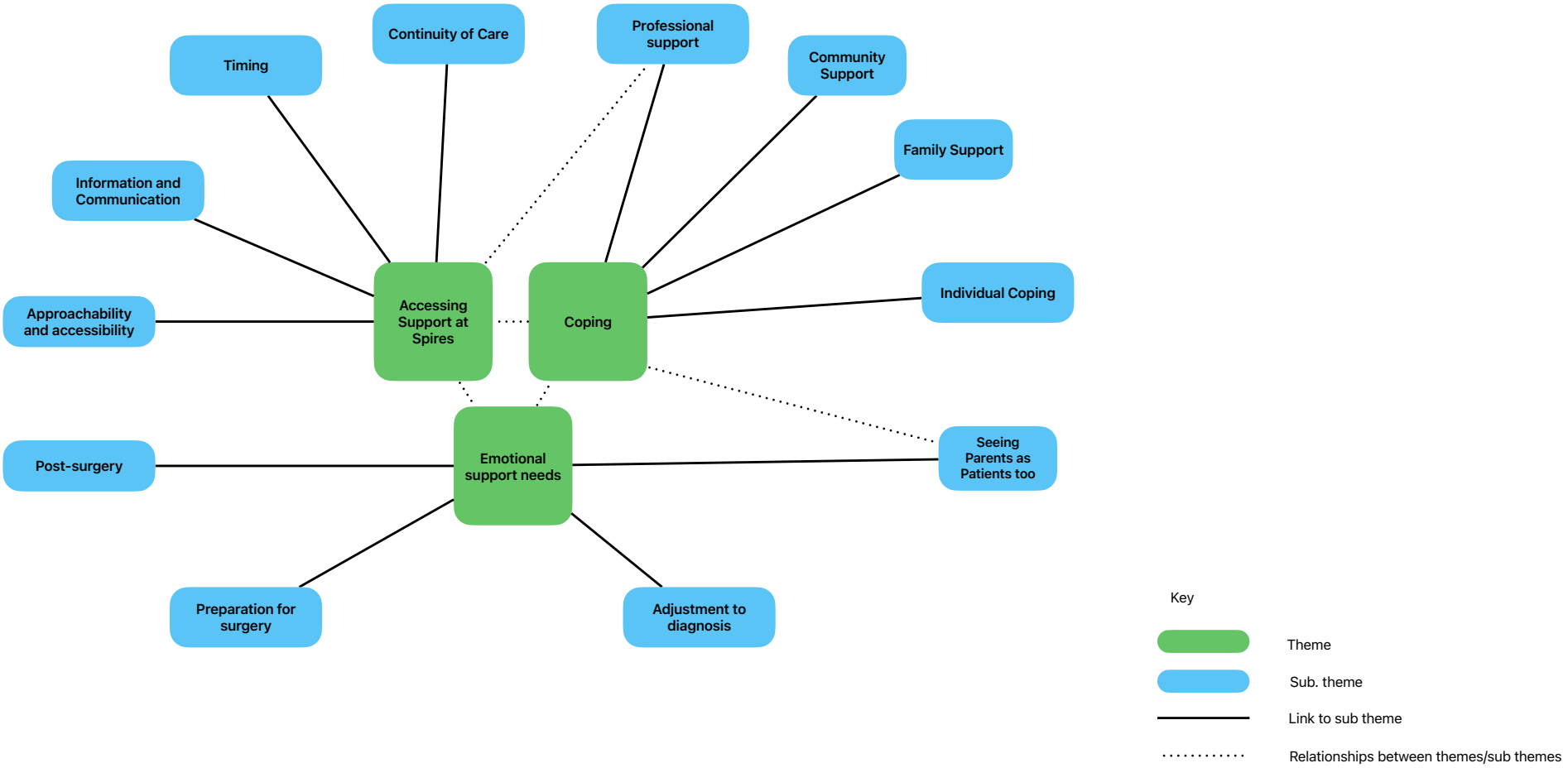

Figure 2. Overview of Themes and Sub Themes

Three themes and twelve subthemes were generated representing the central characteristics of the research question and aims (Figure 2). Themes include Coping, Emotional Support Needs and Accessing Support at Spires. Themes and subthemes are summarised alongside anonymised quotes taken from transcribed interviews. Thematic analysis guidelines suggest using quantifying language in place of frequencies, as such “all” is used for all or all but one parent, “most” indicates more than half and “some” refers to fewer than half but more than two(Hill et al., 2005).

Theme 1: Emotional support needs

All parents spoke of needing emotional support across different phases of the cleft journey from diagnosis to the primary surgery.

Adjustment to diagnosis

A cleft diagnosis often triggered a complex emotional response in parents. Some parents described feelings of grief “*I can only describe it as almost grieving for the baby that I thought I was going to have”* (P6).

Most parents described fears for the future including bullying and judgement from others. One parent highlighted concerns relating to intersectionality of race “*this brown kid…probably already has one angle to be attacked, but then may look different on top of that, was also like this whole other element that psychologically we were probably both facing.”* (P9-D).

Uncertainty leading to anxiety was described by all parents interviewed "*(it's) too hard to see a forward"* (P3). All parents who had individual support from the psychology team found sessions helpful for understanding the diagnosis "*They answered literally any questions we had …So it was really useful*" (P10).

Most parents who did not have psychology sessions felt that space to process the diagnosis would have been helpful "*Maybe being able to speak to the psychology team just to mentally prepare myself how to cope*" (P9-M)

Preparation for surgery

All parents described heightened emotional needs before surgery. They spoke about the psychological strain of anticipating surgery and their need for clear information, validation and reassurance. Confidence in the cleft team was important "*As long as you see … there are people in the room that know what they're doing then from that comes content and satisfaction*" (P5).

A person-centred support from the psychology team to aid understanding was helpful for all parents who had psychology sessions "*that was really nice that you had the option of whatever you felt you needed."* (P10).

All parents highlighted the emotional impact of bringing their child down for surgery, "*the hardest part throughout all of it was the giving her up."* (P3). While

some parents thought it would be helpful to have some psychological support or preparation, "*having a chat with…someone that will listen and ask good questions"* (P7), some felt it was a moment that couldn't be prepared for "*we have to go through to have the end result"* (P8).

Post-Surgery

Parents described a range of emotions in the immediate post-operative period from relief to lingering anxiety, "*seeing him was one thing, but then seeing him waking up was another"* (P9-M).

All parents mentioned adjusting to changes in their child's appearance, describing conflicting emotions, with both joy at the success of the repair and difficulty in seeing their child post-surgery "*that was quite a joyous moment … as much as she looked a bit beaten up.*" (P6).

Some parents noted that while clinical focus shifted after surgery, their own emotional needs often remained unaddressed and became more salient as they had space to process their experiences, "*(child) has less needs…I think I needed more support*" (P4).

Seeing Parents as Patients too

While most parents emphasised putting their child first throughout their journey, there was an acknowledgment that it is parents who hold the memories of the

first surgery “B*ut (child’s) not going to remember it. We'll remember it.”* (P6). Most parents noted the importance of checking in on their emotional wellbeing more than once as they are often focused primarily on their child “*you don't even think it's anything to do with you*” (P4).

While reassurance was helpful in managing the uncertainty around their child’s treatment, most parents indicated the need for processing the emotional impact of the journey for themselves “*to just have been able to talk to someone to share a frustration ... to potentially cry and to say like what to do*” (P9-D).

Some parents described accessing psychological support outside of the cleft service at later points and how their experiences with their child’s cleft care impacted the difficulties they presented with “*you just keep going... Until you eventually can't go anymore*” (P4) and questioned whether having psychological support around the time of their child’s primary surgery would have changed things “*if something like that was available, I think it could have been game changing*” (P9-D).

Theme 2: Coping

Parents reported a wide range of coping mechanisms, influenced by the availability of different support systems and their individual resilience.

Individual Coping

Parents utilised and developed personal strategies to maintain emotional stability through the process. Some parents described how accessing research and focusing on the controllable was helpful for them "*for me it's all about research*" (P6). Most parents spoke about accepting that the surgery had to be done allowed them to "*just get on with it"* (P4). One parent described how previous experience of cleft care helped them cope *"it's almost like you say you've learned from each time"* (P5).

Some parents described internal barriers to accessing therapy including stigma *"the stigma associated to getting therapy and it's like...I'm not depressed, I'm not anxious. I'm not, I'm fine.*" (P9-D), having previous negative experiences with therapy *"I really struggle with talking therapy … I've had some really bad experiences as a child with it"* (P7) and feeling unable to ask for help "*I personally am not someone who would actively reach out and get help"* (P9-M).

Family Support

Family members including partners, extended family and close friends played a crucial role in the day-to-day coping of parents, "*we felt so supported with family*" (P1). One parent described the difficulty of accepting support "*I needed them in, but I kept pushing them out*" (P7).

Some parents described negative interactions, feeling that family members didn't understand the experiences they were going through and struggling to explain it to them "*they were supportive, but as much as she can be*." (P4).

Community support

Support from broader networks such as the Cleft Lip and Palate Association (CLAPA), online forums and parent groups provided many parents with a sense of solidarity, reducing isolation and fear. "*CLAPA do a few FaceTime meets. We found those quite helpful*" (P3).

All parents interviewed highlighted the importance of speaking with families who had lived experience "*that was really nice to talk to somebody that was in the same boat*" (P6). Some suggested it would be helpful to have a support group within the cleft service "*You'd feel comforted knowing that someone else's experienced what your experiencing*" (P2).

Professional support

Most parents emphasised the importance of healthcare professionals for their clinical input and the support they provided. Most parents spoke of the nursing team providing emotional support "(*nurse) was, like, our rock with through the whole thing*" (P3). All parents who had psychology sessions within the cleft service found they helped with experiences of distress "*they were able to calm us down*" (P8).

Clear communication and empathy from the cleft team provided comfort during uncertainty "*everyone in there were great, they kept saying ... it'll be alright*" (P7).

Some parents reported feeling overwhelmed by medical jargon, highlighting the need for consistent emotional attunement from professionals "*Everything comes with a bit of - oh yeah, I think I understood that, but I'm not 100% sure"* (P5). One parent found psychology sessions particularly helpful as they communicated more simply *"they'll give it to you in layman's terms and I think that was really, really helpful*" (P10).

Theme 3: Accessing Support Through the Cleft Service

All parents described how positive relationships with the cleft team helped their emotional wellbeing "*Spires was the best support. They did an amazing job*" (P8).

Approachability and Accessibility

Most parents valued that the cleft team, particularly nurses and surgeons, were approachable and available. A friendly demeanour and openness to questions made parents feel more confident in the care process "*they've been very hands on and available to us*" (P6).

Conversely, perceived distance or lack of visibility, particularly of the psychology team resulted in most parents not accessing support. Some parents could not remember if they had met a psychologist "*check in more, then it might be*

memorable." (P4). Others commented that psychology had not been mentioned in appointments "*I don't think, it's ever been recommended strongly that I should speak to a psychologist*" (P6). Some parents felt a more proactive approach from the psychology team would have been helpful "*if someone reached out to me and made me realise that it's there… that would have been really helpful*" (P9-M).

Information and Communication

Timely, clear and empathetic communication helped parents navigate their child's care and reduced distress experienced by parents "*asking all these questions then helped with the emotion because I was less stressed obviously if I knew the answers*" (P4). Parents appreciated when information was tailored to their level of understanding and delivered with emotional awareness "*hospitals can be scary places, as long as there's someone somewhere saying ... do this. Don't do that. You're OK - Then it's all good*" (P5). Some parents would have preferred more written resources "having it written down …when they've told you 1000 things, you can't remember everything." (P4).

Timing

Parents emphasised that *when* support or information was provided made a difference. Parents appreciated not being overloaded with information "*that was really helpful…she just told us exactly what we needed*" (P9).

The cleft team taking a proactive role made things easier for some parents "*I think it was always there before we even needed to ask for it*" (P5). The timing of check in calls from psychology was highlighted, with some parents indicating calls earlier in their pregnancy would have been helpful "*it would probably benefit for it to be earlier on than when I had it*" (P3). Most parents suggested check ins around specific events (e.g. diagnosis, before and after surgery) "*it might be just useful just to get ... the psychology team to check in*" (P1).

Continuity of Care

A consistent team helped build trust between parents and staff. Parents who experienced continuity with nursing staff across appointments described a greater sense of safety "*I think it's just the consistency that (nurse) would pop round so often*" (P7). Some parents who experienced changes in their case team described the impact this had on their care *"it was it was a bit of a rocky patch… But once we found (nurse)…I couldn't fault any of them, but… having that stability would have been nice*" (P10). Some parents were also comforted by the fact their child would remain with the team into the future "*They're also going to be with …until she's 21. Yeah, that was very helpful*" (P8).

Recommendations

Findings from the study were shared and reviewed with the psychology team and used to identify recommendations for improving psychological support within the

service. Recommendations were organised into three domains: Information and Psychoeducation, Clinical Interventions and Integrated Service Delivery. Information and Psychoeducation addressed the need for equipping families with accessible resources to normalise psychological experiences and facilitate engagement with the service. Clinical interventions addressed improvements to direct clinical support, peer support and patient centred intervention. Integrated Service Delivery focused on enhancing the visibility, responsiveness and effectiveness of the psychology team within the wider cleft team.

Table 4. Service Improvement Recommendations

1. Information and psychoeducation
1.1 Development of resources for parents and extended families/friends normalising common emotional responses following a cleft diagnosis, including what to expect and typical worries.
1.2 Create a resource for parents regarding surgery, addressing emotional reactions to changes in appearance and strategies for coping
1.3 Provide all parents with accessible information about psychological support options at different stages (post-diagnosis, pre-surgery and post-surgery) and ensure parents are prompted with this information at those timepoints.
1.4 Develop a formal list of parents willing to share their experiences with others
1.5 Ensure resources use accessible language and are framed in a way that reduces stigma and encourages families to engage with psychology.

2.0 Clinical interventions
2.1 Review pathway for routine-check in and reintroduction of routine post-diagnosis psychology check-in calls with families. Prior pathways included contact with parents within 4 weeks of diagnosis, including pre-natal and post-natal diagnosis.
2.2 Develop a “bump and babies” group with nursing staff to support peer connection.
2.3 Options for 1:1 psychology sessions and sessions with both parents when accessing psychology support.
3.0 Integrated Service Delivery
3.1 Increase visibility of psychology team at New Baby MDT appointments, consider assistant psychologist to be assigned this role.
3.2 Offer reflective practice groups for MDT staff who are seeing parents regularly for appointments, particularly nursing colleagues.
3.3 Training for MDT staff regarding normal adjustment and distress, screening for parents who might be struggling (e.g. those with additional stressors/lack of social support).
3.4 Recording of antenatal contact with parents within the child’s file.
3.5 Implementation and regular monitoring of impact of changes to service delivery.

Discussion

The aim of this study was to understand the support being provided and parental experience of psychological support within the cleft service and to inform service improvement recommendations for the psychology team. The phase one audit found just over a quarter of children who underwent their primary surgery in 2023 had contact with psychology by May 2024. Whilst current recommendations indicate that children and their families should be seen by a specialist psychologist before their sixth birthday(NHS, 2013), the results of this study suggest that contact with psychology at an earlier time point would be beneficial.

A key finding was the need to view parents as patients, particularly as they are the ones holding the emotional impact of this phase of cleft treatment. In line with previous studies, parents described how adjustment to the diagnosis and the impending surgery disrupted their sense of normalcy and evoked emotions including grief, anxiety, fear, shame, sadness and guilt(Carvalho et al., 2021; Hlongwa & Rispel, 2018; Nelson et al., 2012). Existing literature has shown direct causal relationships between parental anxiety and stress and experiences of the same emotions in their children(Eley et al., 2015). Specific to cleft care, parent-infant interactions and broader family functioning appear to influence a child's early development and adjustment to some extent, although the nature of these effects remains mixed(Stock & and Feragen, 2016).

Individual parents needs differed but all parents reported emotional impact from the point of diagnosis, emphasising the importance of psychological support early

in a family's cleft journey. Parents reported anticipatory stress prior to surgery and commented on the benefits of confidence in the teams and tailored psychological support. Previous research has suggested that individualised support from psychological staff may improve parental well-being around their child's surgery(Gabriel et al., 2018).

Previous studies have highlighted significantly improved quality of life for parents following surgical intervention(Emeka et al., 2017). Most parents reported positive emotions like relief and joy following their child's surgery, but these were often accompanied by ongoing anxiety concern for their child's health and recovery. Harvey et al. (2013)noted similar emotions in parents of infants undergoing surgery. Some parents reported delayed impact of stress which required intervention at a later date, suggesting parent's emotional coping may need to be continually monitored by teams.

Parents described individual resources in the form of their own coping strategies and previous experiences. Further, positive relationships between parents and within families helped parents cope during this time. Among families of cleft children, parenting stress and perceived social support have been identified as key factors affecting family functioning(Yuan et al., 2025).

Parents highlighted several systems that interacted with each other which impacted coping including family support, community support and professional support. Many of the parents interviewed had positive support systems around

them but those who didn't struggled more. Previous research have observed that social support is lower for mothers of children born with a cleft(Boztepe et al., 2020). Parents highlighted the benefits of support from those with lived experience through community and social networks. Many parents referenced the utility of the CLAPA Facebook page which has previously been found to be beneficial for parents to connect with others in similar situations(Stock et al., 2018). Parents proposed that a support group within the cleft service could facilitate connections with local families under the same team.

The cleft team played an integral role in parent's perception of their child's condition and surgical experience. Parents identified consistency in care teams and staff as beneficial, while changes in primary staff negatively affected their care experience. Parents also tend to recommend a team-based approach to cleft care and centralisation of services has improved parents' perceptions of outcomes(Austin et al., 2010; Waylen et al., 2015). Accessibility and communication from the cleft team mitigated the impact of uncertainty amongst the parents interviewed. Prior research has suggested that positive parent perceptions in cleft parents are reflective in their child's over-all wellbeing(Brichacek & Matic, 2021).

Parents highlighted a lack of visibility and understanding of what the psychology team could provide. Parents who did not have specific input from psychology often suggested improvements that mirrored the support valued by those who did, suggesting that resourcing within the team may be a key difficulty. Cleft

specialists have previously expressed concern regarding declining resources and discrepancies in resource allocation for cleft services(Stock et al., 2022).

Findings from the present study suggest that in general the cleft team as a whole are enhancing parental resources with their approachability and availability to the parents and positively shaping perceptions through providing reassurance and reliable information. This has resulted in parents having mostly positive experiences with the team. Overall, parents with greater resources (e.g. coping, social support) and more positive interactions with the cleft team tended to view this period more favourably.

Dissemination of the SIP

The aims of this study are in line with the NHS quality improvement framework – “Plan, Do, Study, Act”(Improvement, 2018). The long-term aim of this study is to improve psychological support for parents by the MDT and to increase direct psychological support where needed. This aligns with the NHS Long Term Plan objectives to expand treatment access(Alderwick & Dixon, 2019). The results of this study were fed back to the cleft service MDT and publication will be sought in an appropriate journal.

Limitations

The present study explores parental experience specifically regarding primary repair surgery and cannot generalise to parents of older children with CL/P.

Previous research suggests that familial perspectives can shift beyond the first year and continue to change throughout the lifespan (Noar, 1991).

While the service keeps a record of contact with mothers who are seen antenatally, it became apparent that not all interactions were represented in the data collated as some parents interviewed indicated they had antenatal contact which was inconsistent with the data audit. One of the recommendations to the service was to ensure this was recorded within the child's file so the team could monitor if and when parents were contacted by psychology.

Conclusion

This study consisted of an audit of service data and recording of lived experiences and emotional needs of parents of children undergoing their first repair surgery. Overall, this study highlighted the emotional impact of this period of cleft care on parents and the need to support them as clients through it. Three key themes were found highlighting emotional needs, coping and accessing support through the team. Recommendations for psychological support that could bolster parental resources and perceptions for coping were explored with the psychology team and were fed back to the wider cleft team in May 2025. Recommendations should be implemented and monitored to help ensure parents emotional needs are met appropriately during this period of their child's cleft care.

References

1. Salari N, Darvishi N, Heydari M, Bokaee S, Darvishi F, Mohammadi M. Global prevalence of cleft palate, cleft lip and cleft palate and lip: A comprehensive systematic review and meta-analysis. *Journal of Stomatology, Oral and Maxillofacial Surgery*. 2022/04/01/ 2022;123(2):110-120. doi:https://doi.org/10.1016/j.jormas.2021.05.008

2. Fitzsimons KJ, Mukarram S, Copley LP, Deacon SA, van der Meulen JH. Centralisation of services for children with cleft lip or palate in England: a study of hospital episode statistics. *BMC Health Services Research*. 2012/06/10 2012;12(1):148. doi:10.1186/1472-6963-12-148

3. Brichacek MA, Matic DB. Parental Perceptions Following Cleft Lip Repair in Their Children. *Journal of Craniofacial Surgery*. 2021;32(3)

4. NHS. NHS Standard Contract for Cleft Lip and/or Palate Services Including Non-Cleft Velopharyngeal Dysfunction (VPD) (All Ages). Accessed 22 February 2025, 2025. https://www.england.nhs.uk/wp-content/uploads/2013/06/d07-cleft-lip.pdf

5. Nelson PA, Kirk SA, Caress AL, Glenny AM. Parents' emotional and social experiences of caring for a child through cleft treatment. *Qual Health Res*. Mar 2012;22(3):346-59. doi:10.1177/1049732311421178

6. Stock NM, Blaso D, Hotton M. Caring for a Child with a Cleft Lip and/or Palate: A Narrative Review. *The Cleft Palate Craniofacial Journal*. 2024;0(0):10556656241280071. doi:10.1177/10556656241280071

7. Stock NM, Costa B, White P, Rumsey N. Risk and Protective Factors for Psychological Distress in Families Following a Diagnosis of Cleft Lip and/or Palate.

The Cleft Palate Craniofacial Journal. 2020;57(1):88-98. doi:10.1177/1055665619862457

8. Lentge K, Lentge F, Zeller AN, et al. Cleft lip and palate: the psychological burden of affected parents during the first three years of their children's lives. *Int J Oral Maxillofac Surg*. Nov 2022;51(11):1462-1468. doi:10.1016/j.ijom.2022.04.003

9. Boztepe H, Çınar S, Özgür M, Fatma Figen. Parenting Stress in Turkish Mothers of Infants With Cleft Lip and/or Palate. *The Cleft Palate Craniofacial Journal*. 2020;57(6):753-761. doi:10.1177/1055665619898592

10. Vanz AP, Ribeiro NR. [Listening to the mothers of individuals with oral fissures]. *Rev Esc Enferm USP*. Jun 2011;45(3):596-602. Escutando as mães de portadores de fissuras orais. doi:10.1590/s0080-62342011000300007

11. Knapke SC, Bender P, Prows C, Schultz JR, Saal HM. Parental Perspectives of Children Born with Cleft Lip and/or Palate: A Qualitative Assessment of Suggestions for Healthcare Improvements and Interventions. *The Cleft Palate Craniofacial Journal*. 2010;47(2):143-150. doi:10.1597/08-259_1

12. Stock NM, Zucchelli F, Hudson N, Kiff JD, Hammond V. Promoting Psychosocial Adjustment in Individuals Born With Cleft Lip and/or Palate and Their Families: Current Clinical Practice in the United Kingdom. *The Cleft Palate Craniofacial Journal*. 2020;57(2):186-197. doi:10.1177/1055665619868331

13. Hotton M, Cropper J, Rundle J, Crawford R. The role of the clinical psychologist within a cleft service. *British Dental Journal*. 2023/06/01 2023;234(12):887-891. doi:10.1038/s41415-023-5952-0

14. Hill R. 1. Generic Features of Families under Stress. *Social Casework*. 1958;39(2-3):139-150. doi:10.1177/1044389458039002-318

15. Boettcher J, Zapf H, Fuerboeter M, et al. Perceived mental health in parents of children with rare congenital surgical diseases: a double ABCX model considering gender. *Orphanet Journal of Rare Diseases*. 2021/09/09 2021;16(1):384. doi:10.1186/s13023-021-01998-9

16. Joseph RA, Goodfellow LM, Simko LC. Double ABCX Model of Stress and Adaptation in the Context of Families That Care for Children With a Tracheostomy at Home: Application of a Theory. *Advances in Neonatal Care*. 2014;14(3):172-180. doi:10.1097/anc.0000000000000062

17. Vaughn LM, Jacquez F. Participatory research methods–choice points in the research process. *Journal of participatory research methods*. 2020;1(1)

18. Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative research in psychology*. 2006;3(2):77-101.

19. Hill CE, Knox S, Thompson BJ, Williams EN, Hess SA, Ladany N. Consensual qualitative research: An update. *Journal of counseling psychology*. 2005;52(2):196.

20. Hlongwa P, Rispel LC. “People look and ask lots of questions”: caregivers’ perceptions of healthcare provision and support for children born with cleft lip and palate. *BMC Public Health*. 2018/04/16 2018;18(1):506. doi:10.1186/s12889-018-5421-x

21. Carvalho NO, Matos MFS, Belchior IFC, Araújo MB, Rocha CT, Neves BG. Parents' emotional and social experiences of caring a child with cleft lip and/or palate. *Pesquisa Brasileira em Odontopediatria e Clínica Integrada*. 2021;21:e0168.

22. Eley TC, McAdams TA, Rijsdijk FV, et al. The intergenerational transmission of anxiety: a children-of-twins study. *American Journal of Psychiatry*. 2015;172(7):630-637.

23. Stock NM, and Feragen KB. Psychological adjustment to cleft lip and/or palate: A narrative review of the literature. *Psychology & Health*. 2016/07/02 2016;31(7):777-813. doi:10.1080/08870446.2016.1143944

24. Gabriel MG, Wakefield CE, Vetsch J, et al. The Psychosocial Experiences and Needs of Children Undergoing Surgery and Their Parents: A Systematic Review. *Journal of Pediatric Health Care*. 2018/03/01/ 2018;32(2):133-149. doi:https://doi.org/10.1016/j.pedhc.2017.08.003

25. Emeka CI, Adeyemo WL, Ladeinde AL, Butali A. A comparative study of quality of life of families with children born with cleft lip and/or palate before and after surgical treatment. *Journal of the Korean Association of Oral and Maxillofacial Surgeons*. 2017;43(4):247.

26. Harvey KA, Kovalesky A, Woods RK, Loan LA. Experiences of mothers of infants with congenital heart disease before, during, and after complex cardiac surgery. *Heart & Lung*. 2013;42(6):399-406.

27. Yuan L, Du Y, Gao Y, et al. The role of parenting stress and perceived social support in affecting family function among families of patients with cleft lip and/or palate: a path analysis based on the family adjustment and adaptation response model. *BMC Oral Health*. 2025;25(1):454.

28. Stock NM, Martindale A, Cunniffe C. #CleftProud:A Content Analysis and Online Survey of 2 Cleft Lip and Palate Facebook Groups. *The Cleft Palate Craniofacial Journal*. 2018;55(10):1339-1349. doi:10.1177/1055665618764737

29. Austin AA, Druschel CM, Tyler MC, et al. Interdisciplinary Craniofacial Teams Compared with Individual Providers: Is Orofacial Cleft Care more Comprehensive and Do Parents Perceive Better Outcomes? *The Cleft Palate Craniofacial Journal*. 2010;47(1):1-8. doi:10.1597/08-250.1

30. Waylen A, Ness A, Wills A, Persson M, Rumsey N, Sandy J. Cleft Care UK study. Part 5: child psychosocial outcomes and satisfaction with cleft services. *Orthodontics & Craniofacial Research*. 2015;18:47-55.

31. Stock NM, Zucchelli F, Hammond V, Hudson N, Sell D. Facilitators and barriers to delivering an optimal specialist service: an example from cleft lip and/or palate care. *British Journal of Healthcare Management*. 2022;28(8):1-10. doi:10.12968/bjhc.2021.0051

32. Improvement N. Plan, Do, Study, Act (PDSA) cycles and the model for improvement. *London: NHS*. 2018;

33. Alderwick H, Dixon J. The NHS long term plan. British Medical Journal Publishing Group; 2019.

34. Noar JH. Questionnaire survey of attitudes and concerns of patients with cleft lip and palate and their parents. *The Cleft Palate-Craniofacial Journal*. 1991;28(3):279-284.

Theory Driven Research Project

An Experimental Investigation of the Impact of Autism on Clinicians' Judgement of Anxiety Disorders

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Proposed Journal: This report is intended for submission for *The Cognitive Behaviour Therapist* and has been prepared in accordance with their guidelines (Appendix N). This journal specifically targets practicing CBT therapists, supervisors and trainers for whom this study would be relevant. Similar studies have been published in this journal.

Abstract

Autistic people often face barriers to accessing mental health support despite mental health disorders being more prevalent in this population. The current study aimed to evaluate whether clinicians' judgements of a patient presenting with anxiety were influenced by suggested autistic traits. An experimental design was utilised to investigate mental health professionals' clinical expectations of a patient being assessed for treatment of an anxiety disorder, relative to no information and two levels of descriptive information indicative of autism. 106 clinicians watched a vignette of a woman attending for initial CBT assessment of anxiety and then responded to measures related to expectations, engagement, optimism and pessimism of ongoing treatment. Clinicians were allocated to one of three conditions providing different levels of suggestion of autism, from no mention of autism to a suggestion that assessment might be beneficial. No differences were found between conditions suggesting the autism label did not significantly influence clinicians' perceptions of the individual or their expectations for treatment. Results indicated that clinicians reported observing more optimistic than pessimistic signs informing expectations for therapy across conditions. The findings align with previous research related to perceptions of an autism label in the general population. Limitations of the study include use of actors in the vignette, the use of unvalidated measures and that the present study was limited to clinicians residing in the UK. Clinical implications and directions for future research are discussed.

Keywords: *autism, anxiety, clinicians' judgements, diagnosis, labelling*

Introduction

Anxiety disorders are believed to result from distorted beliefs about the dangerousness of certain situations, sensations and/or mental events and the way the affected person responds to such beliefs (Clark, 1999). They affect an estimated 29% of individuals over their lifetime (Kessler et al., 2010). The leading treatment for anxiety disorders is Cognitive Behavioural Therapy (CBT) (Otte, 2011). Comorbidity in anxiety disorders is common, and of particular interest here is the link with autism, which is poorly understood (Rodgers & Ofield, 2018).

Autism is a relatively common neurodevelopmental condition, affecting approximately 1% of adults in the UK (National Institute for Health and Care Excellence, 2025). However, with prevalence estimates in children and young people currently around 3% (O'Nions et al., 2023), it is suggested autism is underdiagnosed in adults (O'Nions et al., 2023a). Autism is characterised by problems such as impairments in communication, social interaction and relatedness, and engagement in restricted and repetitive behaviours (American Psychiatric Association, 2013). Co-occurring mental health disorders, including anxiety disorders, are more prevalent among individuals with autism than in non-autistic and other clinical populations (Joshi et al., 2013). Anxiety disorders are particularly prevalent in autistic individuals (Kerns et al., 2014), with estimates for autistic adults ranging from 28% to 77% (Nimmo-Smith et al., 2020). One study, using data from a medical insurance database in the US, found that 29% of 1507 autistic adults had an anxiety disorder compared with 9% of people in a reference

sample (Croen et al., 2015). Anxiety is related to significant impairment in functioning and can worsen quality of life among individuals with autism (Mazurek, 2018). However, the mechanisms underpinning the interaction between autism and mental health problems are poorly understood.

There is increasing evidence that cognitive based therapies can be helpful in reducing anxiety symptoms in autistic adults (Robertson et al., 2019; White et al., 2018). A recent study examining outcomes of psychological therapy for autistic adults in a naturalistic setting found clinically meaningful decreases in anxiety, although these outcomes were poorer than those without identified autism in a matched cohort (El Baou et al., 2023). However, CBT may offer some benefits in anxiety management in autistic adults compared to no intervention (Linden et al., 2023). The evidence in children and young people indicates moderate effect sizes for improvement following CBT interventions targeting anxiety (Kreslins et al., 2015; Perihan et al., 2020; Ung et al., 2015). There is no evidence that the presence of autism renders CBT ineffective. Overall, is has been proposed that a personalised and less structured approach to anxiety treatment may be an appropriate adjustment to maximise treatment outcomes in autistic adults (Menezes et al., 2022), although there is no evidence that adaptations are *necessary* for autistic adults.

It has been recommended that autistic people should be given access to those mental health interventions that are offered to non-autistic people, guided by the principles of person-centred care (Linden et al., 2023). The National Institute for

Health and Care Excellence (NICE) guidelines indicate that autistic adults with coexisting mental disorders should be offered psychosocial intervention informed by existing NICE guidance for that specific disorder, which for anxiety includes CBT (NICE, 2011, 2012). NICE also suggest several adaptions to the method of delivering cognitive and behavioural interventions (e.g. a more concrete approach, uses of visual and written information, emphasis on changing behaviour rather than cognitions) (NICE, 2012). However the British Psychological Society (BPS), in their best practice guidelines for working with autism, noted that "*Adaptations to standard procedures are often required but at present there are no empirically derived guidelines on how best to adapt standard practice*" (Howlin et al., 2021).

Autistic people are often met with barriers to accessing the support they need. Specific barriers experienced by autistic people trying to access mental health services include; professionals' insufficient autism knowledge, a reluctance to make autism-specific adaptions, a lack of recognition or belief of autistic people's mental health challenges, clients' difficulty with communication and describing symptoms, and being referred back and forth between services (Adams & Young, 2021).

Qualitative research conducted with autistic individuals in the UK has found that they often face challenges accessing evidence-based psychological interventions (Crane et al., 2019). Some have reported being denied access to mental health support or mental health services due to being autistic (Camm-Crosbie et al., 2019). Healthcare professionals have been shown to have limited factual knowledge and misconceptions of autism effecting their ability to engage effectively with autistic

people (Turnock et al., 2022). There is also evidence indicating that clinicians can have difficulty recognising autism, leading to confusion with other conditions that share similar phenotypic characteristics (Fusar-Poli et al., 2022).

Therapists in the UK have indicated less confidence in using their knowledge of CBT to help autistic people than with neurotypical clients, or perceive that CBT might not be suitable for autistic individuals (Cooper et al., 2018; Spain et al., 2023), this despite the growing evidence base of effectiveness of CBT for autistic individuals. Although clinicians have reported that numerous components, interventions, and methods that make up CBT can be beneficial and accessible for individuals with autism, they have suggested that the effectiveness of CBT for anxiety may be inhibited by the presence of autistic traits (e.g. sensory sensitivities, theory of mind impairments, cognitive rigidity) (Spain & Happé, 2020; Spain et al., 2023). While responses to interventions may differ among autistic individuals, it is important to assess the likelihood of success or harm of the intervention to make informed decisions about the most appropriate course of treatment (Linden et al., 2023).

Clinician optimism has been defined as ‘clinician’s self-reported, specific expectancies regarding patient outcomes in a clinical setting’ (Byrne et al., 2006). Optimistic clinician outlook, particularly in the initial part of treatment, has been linked to more positive outcomes for patients in mental health settings (Priebe & Gruyters, 1995).

In a review of experimental studies on labelling theory, Ruscio observed that previous research examining the impact of psychiatric labels failed to distinguish

between the labels and the behaviours they purportedly represent (Ruscio, 2004). He also indicated that studies using behavioural descriptions have more reliable and consistent findings, and that diagnostic labels may simply serve as imperfect means of conveying behavioural information (Ruscio, 2004).

Although identification of autism might inform clinician practice, it is also possible that such a label may induce reluctance to treat or therapeutic pessimism in clinicians. The presence of the autistic label might have a negative impact in the same way as a diagnosis of Borderline Personality Disorder (BPD) has been shown to have on clinician attitudes (Lam et al., 2016; Lam et al., 2016a). The present study draws on this previous work on clinicians' attitudes to diagnosis by Lam et al. (2016) and theory described by Ruscio (2004) and explores the positive and negative factors associated with clinician's response to an autism label, in relation to the individual's treatment outcomes.

Research Questions and Hypotheses

This study aims to examine clinician's reactions to an autism label in terms of their judgement of positive and negative factors in relation to the individual and their treatment engagement and outcome.It is hypothesised that the autism diagnostic label will adversely affect mental health professionals' clinical expectations of a patient being assessed for treatment of an anxiety disorder, relative both to no information and descriptive information indicative of autism.

Methods

Co-Production

An autistic clinician and researcher was consulted during the development of this project and advised on the referral information, vignette and measures used in the study.

Design

106 healthcare professionals were randomly allocated to one of three different experimental conditions: a benchmark condition (condition 1) where the clinician was provided with basic background information. The second condition (condition 2) where the clinician was provided with the basic information as well as a history of behavioural and social features consistent with autism. The final condition (condition 3) provided the clinician with the same information as condition 1 and 2 with an additional reference to a suspected diagnosis of autism. Participants were then shown a video vignette of a client attending for psychological assessment during which they describe recent events which preceded an increase in anxiety. Participants were asked to provide their clinical judgement on the assessment vignette through a series of measures relevant to treatment.

Participants

Participants were qualified mental health clinicians living in the UK. Participants were recruited from across the UK through flyers, emails, social media posts and through snowball sampling.

Procedure

The procedure is outlined in figure 1. Participants completed the study online through Qualtrics which they accessed through scanning a QR code or clicking a link. Participants were initially presented with an information sheet with some general information and explained that the purpose of the study was to examine factors that influenced clinicians' assessment of anxiety and their predictions regarding treatment outcomes (Appendix O). Participants were randomly assigned to one of the three experimental conditions through the Qualtrics platform where conditions were presented equally resulting in 34, 38, and 34 participants allocated to condition 1, 2 and 3 respectfully. Participants were then presented with the corresponding referral information to their condition (Appendix P). Following which they were presented with a 5-minute video vignette of a patient presenting for psychological assessment of anxiety (see Appendix Q for transcript of the video). Participants were then asked to complete the clinical outcomes measure (see Appendix R) to rate the assessment and treatment of the patient using a 12 session CBT model. Following this, participants were asked to complete a free text table asking them to indicate what mould make them feel optimistic and pessimistic for the treatment of the patient viewed in the video (see Appendix S). Finally, participants were asked to complete some demographic

information (see Appendix T). Following completion of the study clinicians were directed to a debriefing page which described the research question (Appendix U).

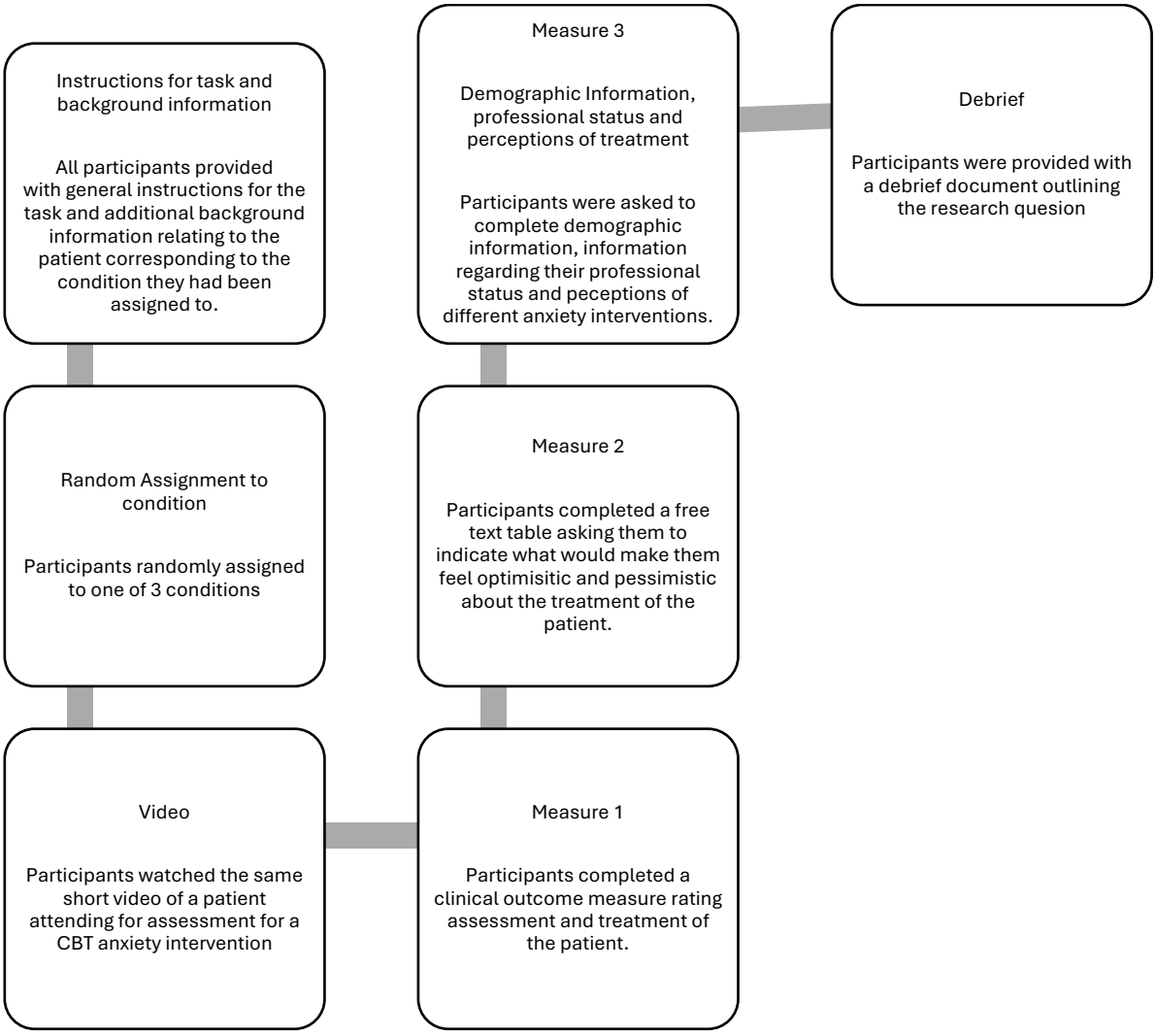

Figure 1. Flowchart of Procedure of study

Power Analysis

An a priori power analysis was conducted using G*Power version 3.1 (Faul et al., 2007) to determine the minimum sample size required to test the study hypothesis (Appendix Y). Results indicated the required sample size to achieve 80% power for detecting a medium effect (f=0.25), α = .05, was N = 102 for a mixed-model ANOVA (main effect).

Effect sizes from previous work by Lam and colleagues, whose design informed the present study, were used to inform the power analysis (Lam et al., 2016). Consistent with Lam's findings f = 0.3 and 0.4, we selected a conservative medium effect size of f = .25 to ensure the study was adequately powered.

Experimental Manipulation

The experimental manipulation was incorporated into the referral information provided before presentation of the vignette. Each referral introduced slightly different background information indicating increasing suggestion of the possibility of autism (Appendix P).

In the control condition (condition 1) participants were provided with a brief description of the patient's experience of anxiety, recent situational factors that were impacting her presentation and some historical details. Condition 2 provided the same information as the control condition with the addition of some additional information which may be related to autism. The information provided in

Condition 3 included the same information as that of Condition 2 but named potential autism.

Measures

The measures were developed for the present study and used to elicit clinician's attitudes *regarding what they had observed in the vignette*. Participants completed three sets of measures during the study.

The first measure consisted of two questionnaires (Appendix R). The first questionnaire consisted of 4 questions and assessed **clinician's expectations regarding the client's response to CBT for anxiety**. Participants rated their responses on a 0-100 visual analogue scale (VAS), with higher scores indicating more positive expectation. The items covered anticipated treatment response, symptom remission, social functioning recovery and academic functioning recovery. The second questionnaire consisted of 4 questions evaluating **clinician's perceptions of a client's likely engagement with therapy and their capacity to participate in the intervention**. Again, responses were rated on a 0-100 VAS, with higher scores reflecting a more favourable assessment. Items queried clinicians' expectations regarding the client's understanding of the therapeutic rationale, the ease of therapeutic alliance, client's engagement in CBT sessions and the client's ability to reflect on their emotions.

The second measure was qualitative and consisted of three open-ended questions that assessed the clinician's overall perspective on the client's treatment (Appendix S). Clinicians were asked to describe the extent of their optimism and concerns about treatment outcomes. Additionally, there was an opportunity for clinicians to share any additional thoughts they had regarding the vignette.

The final measure asked participants to provide some demographic information, information regarding their professional status and views of effectiveness of various psychological interventions (Appendix T). This measure was completed at the end of the task to prevent participants guessing the hypothesis or being otherwise primed by the suggestion of autism. Demographic information provided included sex and gender identity, age, ethnicity, education level, civic status and employment status. Participants were also asked to provide information regarding professional qualifications, CBT delivery experience, years of clinical experience, work context. the populations they worked with and treatment modalities. Clinician's perceptions of the effectiveness of various anxiety treatments including pharmacotherapy, psychotherapy, CBT, exposure and relaxation, rated on a 0-100 VAS scale, were collected.

Data Analysis

The data were analysed using IBM SPSS Statistics (Version 30).

Participant Characteristics (Measure 3)

Preliminary analyses were conducted to examine demographic characteristics across experimental groups. One-way Analyses of Variance (ANOVAs) were used for continuous variables (e.g. age) and chi-square tests were used for categorical variables (e.g. gender).

To examine whether clinician perceptions of anxiety treatment effectiveness (measure 3) differed by modality and group a 5(treatment modality) x 3 (condition) mixed-model ANOVA was conducted. Treatment modality served as a within-subjects factor and experimental condition was the between-subjects factor. Assumptions of sphericity were assessed using Mauchly's test and Greenhouse Geiser corrections were applied when violations were detected. Post hoc pairwise comparisons were conducted where required due to the presence of significant main effects or interactions.

Clinicians Expectations (Measure 1)

A 4 (questions) x 3 (Condition) mixed-model ANOVA was conducted for each of the two questionnaires in the first measure, assessing clinicians' expectations of the client's response to CBT (questionnaire 1) and engagement with CBT (questionnaire 2). In each model the within-subjects factor included the four questions, and the between-subjects factor was the experimental condition.

Optimism vs Pessimism (Measure 2)

Data from the participants responses from the second measure (i.e. free text regarding optimistic and pessimistic views of treatment) were coded into categories using content analysis developed by Lam (2016). The verbatim responses were be examined and definitions of possible categories were generated (Appendix V). Using these working definitions as a guide, the first rater examined the reasons for optimism and pessimism and coded them according to a category definition. A second rater coded a subset of 20% of the responses. Coded categories were then compared to establish how closely they matched. Any mismatches were discussed and any disagreements discussed with the project supervisor. Inter-rater reliability was calculated using Cohen's Kappa coefficient and was 1 (100%) which is considered excellent agreement(Cohen, 1960).

Ethics Statement

All procedures were reviewed and approved by the Medical Science Division at the University of Oxford (R93179/RE001; Appendix W). Participants were provided with information prior to starting the study and provided informed consent via the Qualtrics platform before proceeding to the study (Appendix O). Participants were debriefed at the end of the study to inform them of the research design (Appendix U). No compensation was offered for participation.

Results

Participant Characteristics (Measure 3)

A total of 106 mental health professionals participated in the study and were randomly assigned to one of three experimental conditions: Condition 1 (baseline; n=34), Condition 2 (autistic traits; n=38) and Condition 3 (autism suggested; n = 34). Demographic information is provided in Table 1.

The sample was majority female (81.4%) and white (78.6%). 46.8% of the sample had doctorate level qualifications with the remaining having post-grad qualifications. Participants were mean age of 38.18 years (SD = 9.91), with no significant difference between conditions ($F_{(2, 94)}$ = 1.63, *p* = .202). On average, participants reported 8.89 (SD = 7.42) years of experience treating adults with CBT, with no significant group differences ($F_{(2, 91)}$ = .80, *p*=.316). Of note, some participants did not respond to some items on the outcome measures. Analyses were conducted using completed answers resulting in slightly differing sample sizes per analysis. Missing data are reported for each analysis.

Table 1. Demographic characteristics

	Condition 1 (n=34)	**Condition 2 (n=38)**	**Condition 3 (n=34)**	**Statistical test (df)**	**P**	**Missing data (n)**
Age (years)	M = 35.87(8.95)	M = 40.22 (11.11)	M = 38.19 (9.08)	$F_{(2, 94)}$ =1.62	.202	9
Years treating adults	M = 7.74 (5.66)	M = 10.09 (8.58)	M = 8.77 (7.69)	$F_{(2, 91)}$ = 0.80	.451	12
Gender (Male/Female)*	6/25	6/30	6/24	χ^2 (2) = 0.14	.993	9
Ethnicity (White/Other)*	22/9	31/5	24/7	χ^2 (2) = 2.30	.316	8
Qualification (Doctorate/Postgrad)*	13/18	18/15	13/17	χ^2 (2) = 1.23	.539	12

* additional information on gender, ethnicity and qualifications is available upon request

Treatment Effectiveness (Measure 3)

Clinicians' perceptions of treatment modality effectiveness was assessed using a 5 (Treatment Modality) x 3 (Experimental Condition) mixed-model ANOVA. Data were missing for 12 participants. Mauchly's Test of Sphericity was violated χ^2 (5) = 79.88, $p < .001$, as such Greenhouse-Geisser adjustments were used. A significant main effect of treatment modality was found ($F_{(3.25, 295.56)} = 53.65$, $p < .001$, $\eta^2p = .371$), showing participants rated some modalities as more effective than others. There were no differences between conditions ($F_{(6.50, 295.56)} = 1.18$, $p = .318$, $\eta^2p = .025$).

Post-hoc comparisons found that CBT (M = 77.32, SD = 1.44) was perceived to be significantly more effective than all other treatments, $p < .001$ (Figure 2). Exposure therapy (M = 72.26, SD = 1.62) was also rated significantly higher than the other three modalities, $p < .01$. No significant differences were found between pharmacotherapy (M = 48.752, SD = 2.14), psychotherapy (M = 53.752, SD= 2.62) and relaxation (M = 49.186, SD =2.67).

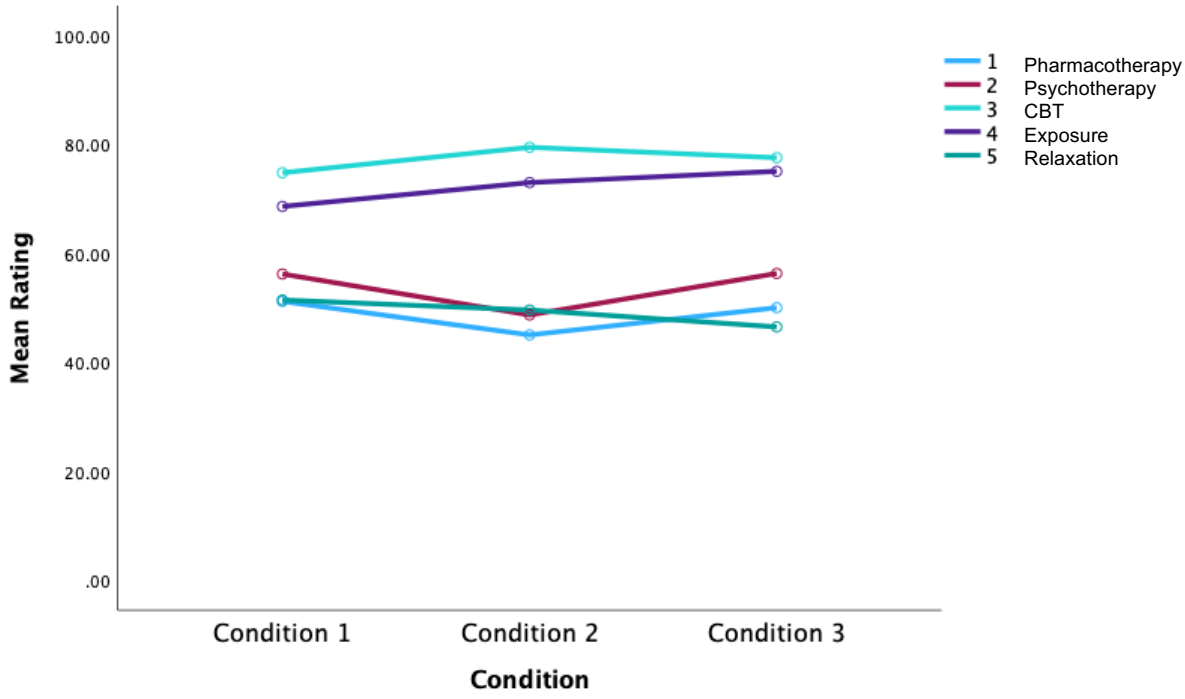

Figure 2. Mean Ratings of effectiveness by condition

Primary variable: Outcome Expectations (Measure 1 – Questionnaire 1)

A 4(questions) x 3 (Condition) mixed-model ANOVA was used to assess clinicians' expectations for outcomes for the client from a 12 session CBT intervention (Figure 3). All participants completed the scales. Mauchly's Test of Sphericity was violated χ^2 (5) = 25.34, $p < .001$, as such Greenhouse-Geisser adjustments were used. The main effect of question was not significant ($F_{(2.55, 262.46)} = 2.48$, $p = .071$, $\eta^2p = .024$); neither was the main effect of experimental condition ($F_{(2,103)} = 1.55$, $p = .217$, $\eta^2p = .029$), and the interaction was not significant ($F_{(5.10, 262.46)} = 0.57$, $p = .727$, $\eta^2p = .011$).

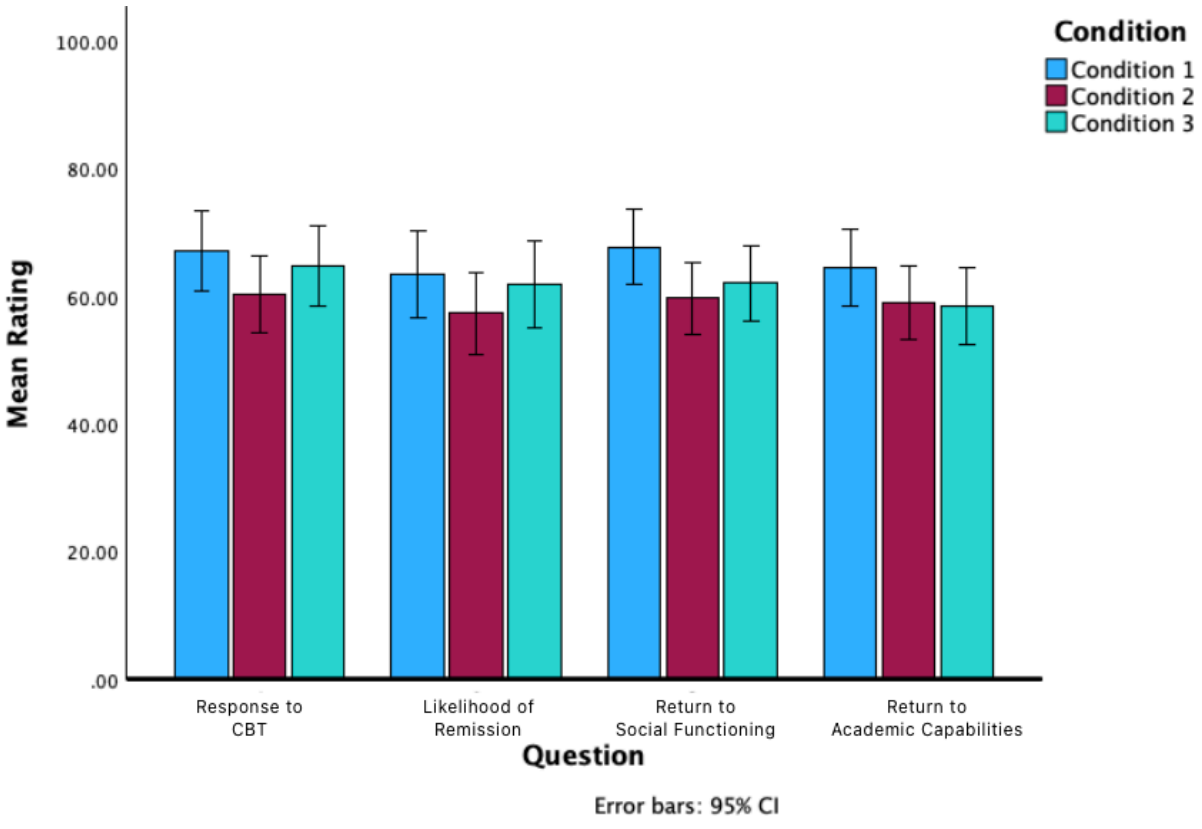

Figure 3. Mean Rating of Expectations by Condition

Engagement in Therapy (Measure 1 – Questionnaire 2)

A further 4 (question) x 3 (condition) mixed-model ANOVA was conducted to investigate clinicians' expectations for the client's engagement in therapy (Figure 4). All participants completed the rating scales. Again, Mauchly's Test of Sphericity was violated χ^2 (5) = 18.30, p = .003 and Greenhouse-Geisser adjustments were used. The main effect of question was not significant ($F_{(2.69, 276.51)}$ = 2.09, p = .109, η^2p =.020), nor was the main effect of experimental condition ($F_{(2, 103)}$ = 1.72, p =.185, η^2p =.032), or the interaction between question and condition ($F_{(5.37, 276.51)}$ = 1.37, p = .234, η^2p =.026).

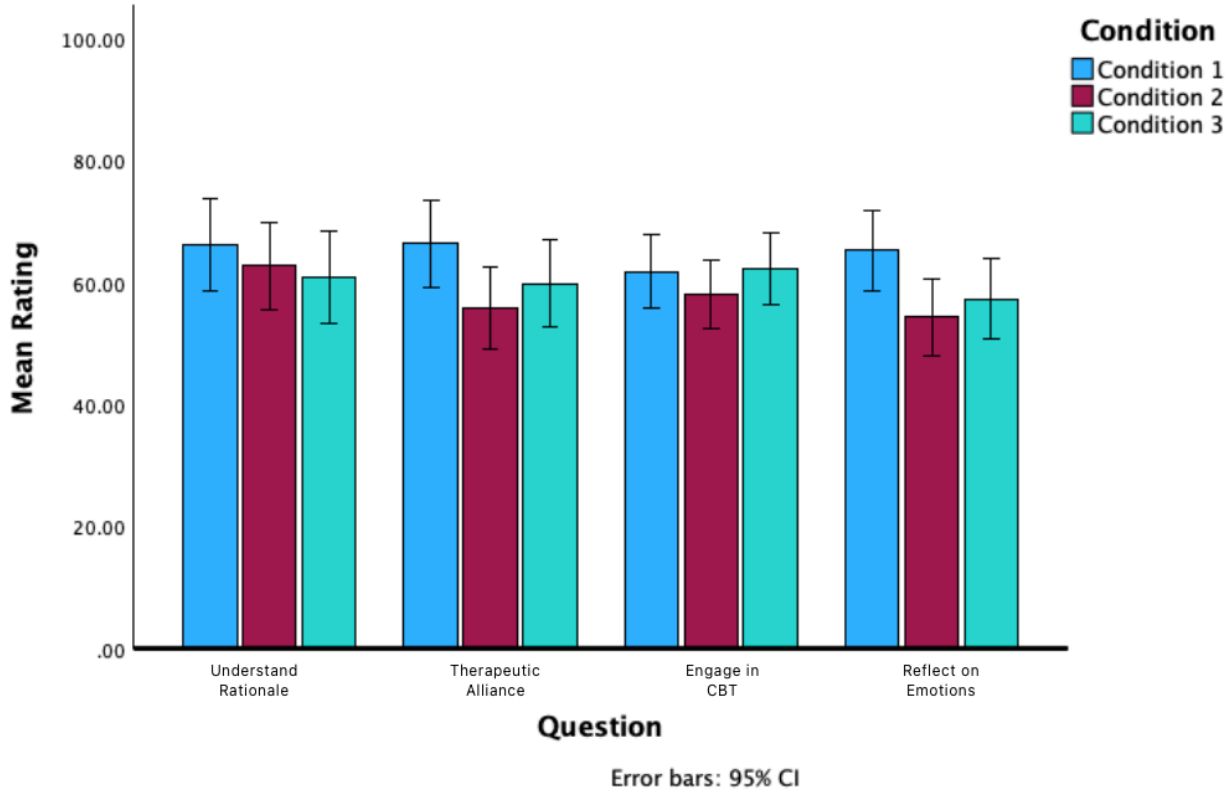

Figure 4. Mean Rating of Engagement by Condition

Optimism vs Pessimism (Measure 2)

98 participants completed the Optimism and Pessimism measure. Inter-coder reliability for the content analysis was calculated using Cohen's Kappa and was 1 (100%), which is considered excellent agreement. A 2 (number of optimistic vs. pessimistic reasons endorsed) x 3 (condition) mixed-model ANOVA was used to evaluate how optimistic and pessimistic clinicians were (Figure 5). A significant main effect for optimism vs. pessimism was found ($F_{(1,95)} = 6.58$, $p = .012$, $\eta^2p = .065$), indicating that clinicians endorsed significantly more optimistic than pessimistic outcomes. There was no significant main effect of condition ($F_{(2,95)} =$

0.67, p = .518, η^2p =.014). There was no interaction effect between conditions ($F_{(2,95)}$ = 1.52, p = .224, η^2p =.031).

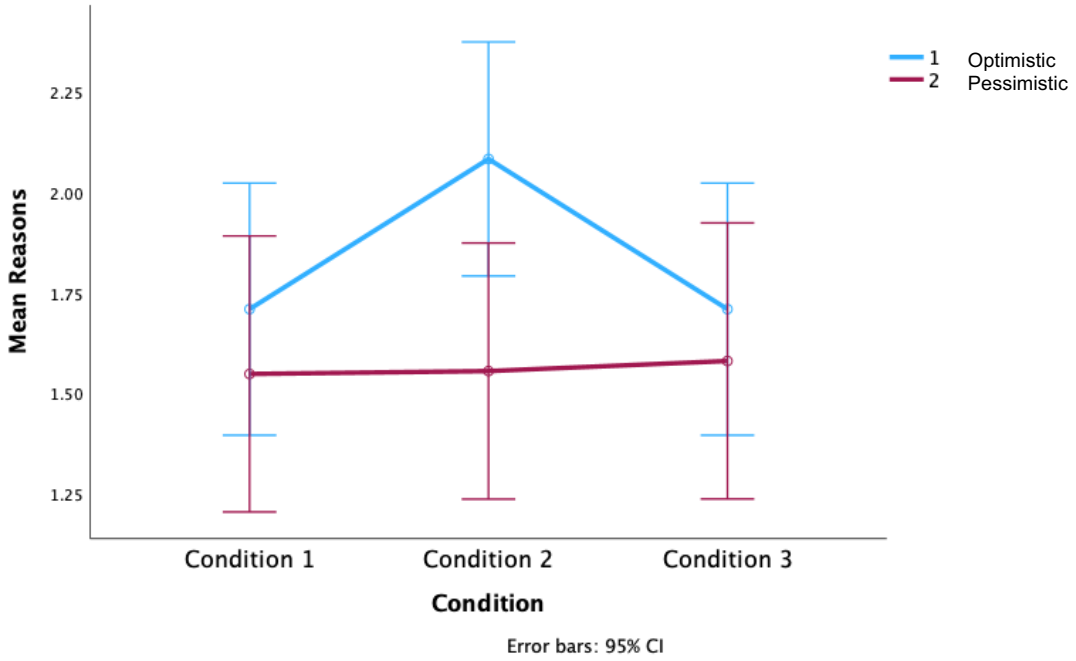

Figure 5. Mean Optimistic vs Pessimistic Reasons by condition

Discussion

This study aimed to investigate the extent to which an autism label influences clinicians' judgements regarding an individual's engagement and outcomes in relation to an assessment purported to be for a 12 session CBT treatment for anxiety. It was hypothesised that presence of the autism diagnostic label would adversely affect mental health professionals' clinical expectations, relative both to no information and two levels of descriptive information indicative of autism. Contrary to our expectations, the finding of the current study do not support the

hypothesis and neither mention of linked behaviour or the autism label significantly influenced clinicians' perceptions of the individual or their expectations for treatment. The associated effect size for these nonsignificant results were consistently small, suggesting that if any effect does exist, and could be identified by a much larger sample, they are likely to be minimal and of limited clinical consequence. In contrast, significant main effects were observed for the analyses of expectation of therapeutic modality and for optimism versus pessimism, both of which were associated with moderate to large effect sizes. These findings suggest that clinicians consistently endorsed more optimistic than pessimistic observations across conditions. Further, they consistently identified CBT as the most effective treatment, which could be explained due to all clinicians practicing CBT. Overall, these results suggest that while clinicians were more optimistic than pessimistic, the suggestion of autism had little effect.

The null findings of the present study align with studies investigating responses to an autism label within the general population, where the presence of an autistic label did not effect individuals responses, social distance, attitudes or discrimination towards autistic people (Bolton & Ault, 2018; Butler & Gillis, 2011; Ohan et al., 2015). However, previous research within the general population has also found more positive (Matthews et al., 2015; Norris et al., 2024; O'Connor et al., 2020) and unfavourable (Alkhaldi et al., 2019) perceptions of people when assigned an autism label.

Less is known about the influence of diagnostic labelling amongst clinicians. This study follows research by Lam and colleagues (Lam et al., 2016; Lam et al., 2016a) which found that the use of the BPD diagnostic label resulted in clinicians reporting significantly fewer reasons to be optimistic and more negative ratings of presenting problems and prognosis than a non-label group and a group where BPD behaviours were described. While the results of this study differ, it could suggest that particular diagnostic labels are viewed more negatively by clinicians than others. Previous research has also found that professionals attitudes are more negative and they are less optimistic about treatment of people with personality disorder diagnoses than people schizophrenia or depression diagnoses (Markham, 2003; Markham & Trower, 2003).

It is important to note that previous studies outside of labelling theory have found that clinicians have more positive views of treatment outcomes for autistic people than autistic people do themselves. Previous reviews have found that larger effect sizes for change of anxiety symptomology have been reported by clinicians and parents than on self-report measures following CBT in autistic children and adolescents (Kreslins et al., 2015; Sukhodolsky et al., 2013; Ung et al., 2015) and in CBT interventions in autistic people across the lifespan (Weston et al., 2016). It may be that clinicians are overly optimistic about CBT treatment in autistic populations and the individuals themselves may not be experiencing therapy in the same way. However, this optimism, even if misplaced, may be beneficial for therapy as a whole as previous research had found that psychotherapists expectations for therapy explained 7.3%-10% of the variance in treatment outcomes (Connor & Callahan, 2015; Swift et al., 2018).

Strengths and Limitations

Strengths of this study included its use of experimental design which included a structured protocol allowing specific levels of referral information to be tested. Further the random assignment employed in the design was successful in that no differences were observed between groups at baseline. The study also required clinicians to be qualified to practice CBT, resulting in a sample who had experience and established clinical judgement.

This study is not without its limitations. The vignette developed as part of this study was short, scripted and portrayed by actors. The results of this study could reflect clinician's perceptions of the vignette. While it resembled an initial assessment session, it is possible that results may have differed if a clip of an actual assessment had been used or if the person in the vignette had been autistic. Social communication, is a central feature of autism and previous research has indicated that autistic adults are less likely to report being able to describe their symptoms, understand their clinician or highlight an healthcare issue without prompting from a clinician (Morris et al., 2019). Further, the use of a female actor for the client may also have impacted clinicians' responses. Autism is often identified later in females than in males (Gonçalves Garcia et al., 2025; Milner et al., 2024) and females are more likely to receive another diagnosis prior to an autism diagnosis (Gonçalves Garcia et al., 2025). Autistic women are more likely to engage in 'masking' or camouflaging autistic traits, which could lead to clinicians underestimating autism related difficulties. Previous research has

identified that masking may contribute to delays in formal identification of autism, or misdiagnosis (Gonçalves Garcia et al., 2025; Milner et al., 2024).

Another limitation to the present study was the measures used. While they were adapted from previous studies by Lam and colleagues (Lam et al., 2016; Lam et al., 2016a), fewer questions were used and the content was changed to better fit with the research questions.

A manipulation check was not included in the design of this study which may have limited results. It is possible that the experimental manipulation was not perceived as intended, for example the clinicians may have disregarded the referral information in which the manipulation lies and based their ratings on the vignette. Future studies could pre-test stimuli or include brief manipulations tests to confirm participants are interpreting the manipulation as designed.

All participants in the study watched the same vignette. Previous research has highlighted the importance of ensuring all elements except for the intended manipulation be kept constant when using video vignettes, which in this study was included in the referral information (Johnson et al., 1988). However, as mentioned, it could have been that clinicians weighted the vignette more than the referral information, which may have impacted the results. Alongside manipulation checks future studies could consider producing multiple vignettes where referral information and behaviour in the assessment session are consistent. For example, in this study sensitivity to noise is specifically mentioned

in condition 2 and matching behaviour could be highlighted in the clients' behavioural presentation during the video vignette. It would be important for researchers to ensure that vignettes were designed such that all behavioural elements, aside from those differences mentioned in the referral information, matched between vignettes.

Recruitment was limited to clinicians residing in the UK and those who participated were largely white and female. While these numbers are reflective of clinicians practicing in the UK (HCPC, 2023; UKCP, 2023), There is emerging evidence to suggest that females have higher levels of acceptance and positive attitudes towards autistic people (Turnock et al., 2022). The results of this study may not be generalisable across genders or to clinicians practicing in other areas of the world.

Finally, 42 of the clinicians who participated in this study indicated they worked with neurodiverse clients. Previous research has shown that clinician knowledge was associated with higher confidence, more favourable views of treatment approaches, use and number of adaptions used (Gallant et al., 2023). As such, in this study it could be that clinician experience with autism might have impacted clinicians' views. Future studies should consider collecting additional information regarding clinician experience working with neurodiversity, for example level of experience and type of neurodiversity they have experience working with and include these factors in analysis.

Clinical Implications

The findings of this study suggest clinicians do not assume worse outcomes for autistic people, which is positive. This could be reflective of the progress in clinicians understanding of autism in more recent years or the improvements in training and awareness that have followed this. They may also reflect that clinicians are taking a more individualised approach to care and are focusing less on diagnostic labels. The finding that clinicians endorsed more optimistic expectations might suggest that clinicians are taking a more a strength-based approach.

However, autistic people continue to report barriers to accessing psychological treatment, with a lack of therapist knowledge or experience in autism or an inability or unwillingness on the part of the therapist to adapt approaches to support autism highlighted as common barriers (Adams & Young, 2021). Similarly previous research has found that health care providers, including mental health staff, do report recognising autistic traits in adults but have highlighted a lack of skills and tools for providing appropriate healthcare support and required further training (Zerbo et al., 2015). As such, these findings should be interpreted with caution as when considering these barriers, they could also suggest a lack of awareness or underestimation of the needs of autistic people in therapy, while it is positive that autistic people are seen equally by clinicians this should not impact equity in service delivery. It should also be considered as to whether the barriers to treatment are from service policies and processes rather than individual clinicians' attitudes.

Research Implications

Future research could explore why clinicians' expectations for outcomes appear to be unaffected by an autism diagnosis. Replicating the study with larger samples or true assessment sessions with autistic people would help establish confirm whether the null finding found in this study is reliable. Research with clinicians outside of the UK could identify any influence of culture.

Future research could also consider including implicit association tests to investigate if clinicians hold unconscious biases that aren't reflected in their self-reported expectations. It might also be helpful to examine the role of previous experience working with neurodiversity as a mediator of the relationship. Qualitative research methods could provide insight into how clinicians form these expectations or if they consider autism when making judgements. Research could also include autistic people's perspectives to see if their expectations align with that of the clinicians. Finally, exploring outcomes of therapy sessions in autistic and non-autistic individuals could help determine if clinician's expectations predict outcomes or if these expectations influence treatment effectiveness.

References

Adams, D., & Young, K. (2021). A Systematic Review of the Perceived Barriers and Facilitators to Accessing Psychological Treatment for Mental Health Problems in Individuals on the Autism Spectrum. *Review Journal of Autism and Developmental Disorders*, *8*(4), 436-453. https://doi.org/10.1007/s40489-020-00226-7

Alkhaldi, R. S., Sheppard, E., & Mitchell, P. (2019). Is There a Link Between Autistic People Being Perceived Unfavorably and Having a Mind That Is Difficult to Read? *Journal of Autism and Developmental Disorders*, *49*(10), 3973-3982. https://doi.org/10.1007/s10803-019-04101-1

American Psychiatric Association. (2013). American Psychiatric Association. (2013). Diagnostic and Statistical Manual of Mental Disorders (5th ed.). https://doi.org/10.1176/appi.books.9780890425596

Bolton, M. J., & Ault, L. K. (2018). Disclosure of diagnosis increases positivity of social responses to autistic individuals. *Psi Chi Journal of Psychological Research*, *23*(2), 110-118. https://doi.org/10.24839/2325-7342.JN23.2.110

Butler, R. C., & Gillis, J. M. (2011). The Impact of Labels and Behaviors on the Stigmatization of Adults with Asperger's Disorder. *Journal of Autism and Developmental Disorders*, *41*(6), 741-749. https://doi.org/10.1007/s10803-010-1093-9

Byrne, M. K., Sullivan, N. L., & Elsom, S. J. (2006). Clinician Optimism: Development and Psychometric Analysis of a Scale for Mental Health Clinicians. *The Australian Journal of Rehabilitation Counselling*, *12*(1), 11-20. https://doi.org/10.1375/jrc.12.1.11

Camm-Crosbie, L., Bradley, L., Shaw, R., Baron-Cohen, S., & Cassidy, S. (2019). 'People like me don't get support': Autistic adults' experiences of support and treatment for mental health difficulties, self-injury and suicidality. *Autism*, *23*(6), 1431-1441. https://doi.org/10.1177/1362361318816053

Clark, D. M. (1999). Anxiety disorders: Why they persist and how to treat them. *Behaviour research and therapy*, *37*(1), S5. https://doi.org/10.1016/s0005-7967(99)00048-0

Cohen, J. (1960). A Coefficient of Agreement for Nominal Scales. *Educational and Psychological Measurement*, *20*(1), 37-46. https://doi.org/10.1177/001316446002000104

Connor, D. R., & Callahan, J. L. (2015). Impact of psychotherapist expectations on client outcomes. *Psychotherapy*, *52*(3), 351-362. https://doi.org/10.1037/a0038890

Cooper, K., Loades, M. E., & Russell, A. (2018). Adapting psychological therapies for autism. *Research in Autism Spectrum Disorders*, *45*, 43-50. https://doi.org/https://doi.org/10.1016/j.rasd.2017.11.002

Crane, L., Adams, F., Harper, G., Welch, J., & Pellicano, E. (2019). 'Something needs to change': Mental health experiences of young autistic adults in England. *Autism*, *23*(2), 477-493. https://doi.org/10.1177/1362361318757048

Croen, L. A., Zerbo, O., Qian, Y., Massolo, M. L., Rich, S., Sidney, S., & Kripke, C. (2015). The health status of adults on the autism spectrum. *Autism*, *19*(7), 814-823. https://doi.org/10.1177/1362361315577517

El Baou, C., Bell, G., Saunders, R., Buckman, J. E. J., Mandy, W., Dagnan, D., O'Nions, E., Pender, R., Clements, H., Pilling, S., Richards, M., John, A., & Stott, J. (2023). Effectiveness of primary care psychological therapy services

for treating depression and anxiety in autistic adults in England: a retrospective, matched, observational cohort study of national health-care records. *The Lancet Psychiatry*, *10*(12), 944-954. https://doi.org/https://doi.org/10.1016/S2215-0366(23)00291-2

Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G*Power 3: a flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behav Res Methods*, *39*(2), 175-191. https://doi.org/10.3758/bf03193146

Fusar-Poli, L., Brondino, N., Politi, P., & Aguglia, E. (2022). Missed diagnoses and misdiagnoses of adults with autism spectrum disorder. *European Archives of Psychiatry and Clinical Neuroscience*, *272*(2), 187-198. https://doi.org/10.1007/s00406-020-01189-w

Gallant, C., Roudbarani, F., Ibrahim, A., Maddox, B. B., & Weiss, J. A. (2023). Clinician Knowledge, Confidence, and Treatment Practices in Their Provision of Psychotherapy to Autistic Youth and Youth with ADHD. *Journal of Autism and Developmental Disorders*, *53*(11), 4214-4228. https://doi.org/10.1007/s10803-022-05722-9

Gonçalves Garcia, S., Simões-Pires, C., Brum, J., & Cabral, J. (2025). Taking Off the Mask: Investigating Autism Diagnosis and Camouflaging in Adult Women. Autism in Adulthood. https://doi.org/10.1089/aut.2024.0150

HCPC. (2023). *Diversity data: Practitioner psychologists - July 2023.* Health and Care Professions Council. https://www.hcpc-uk.org/resources/data/2023/diversity-data-practitioner-psychologists-2023/

Howlin, P., Back, E., Bates, A., Conallen, K., Crabtree, J., Daves-Hales, M., Hannan, S., Hughes, M.-L., Hunt, K., & Ingham, B. (2021). *Working with autism: best practice guidelines for psychologists*. The British Psychological Society.

Joshi, G., Wozniak, J., Petty, C., Martelon, M. K., Fried, R., Bolfek, A., Kotte, A., Stevens, J., Furtak, S. L., Bourgeois, M., Caruso, J., Caron, A., & Biederman, J. (2013). Psychiatric Comorbidity and Functioning in a Clinically Referred Population of Adults with Autism Spectrum Disorders: A Comparative Study. *Journal of Autism and Developmental Disorders*, *43*(6), 1314-1325. https://doi.org/10.1007/s10803-012-1679-5

Johnson, C. G., Levenkron, J. C., Suchman, A. L., & Manchester, R. (1988). Does physician uncertainty affect patient satisfaction? Journal of General Internal Medicine, 3(2), 144-149. https://doi.org/10.1007/BF02596120

Kerns, C. M., Kendall, P. C., Berry, L., Souders, M. C., Franklin, M. E., Schultz, R. T., Miller, J., & Herrington, J. (2014). Traditional and atypical presentations of anxiety in youth with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, *44*(11), 2851-2861. https://doi.org/10.1007/s10803-014-2141-7

Kessler, R. C., Ruscio, A. M., Shear, K., & Wittchen, H.-U. (2010). Epidemiology of Anxiety Disorders. In M. B. Stein & T. Steckler (Eds.), *Behavioral neurobiology of anxiety and its treatment* (pp. 21-35). Springer Berlin Heidelberg. https://doi.org/10.1007/7854_2009_9

Kreslins, A., Robertson, A. E., & Melville, C. (2015). The effectiveness of psychosocial interventions for anxiety in children and adolescents with autism spectrum disorder: a systematic review and meta-analysis. *Child and*

Adolescent Psychiatry and Mental Health, *9*(1), 22. https://doi.org/10.1186/s13034-015-0054-7

Lam, D. C., Salkovskis, P. M., & Hogg, L. I. (2016). 'Judging a book by its cover': An experimental study of the negative impact of a diagnosis of borderline personality disorder on clinicians' judgements of uncomplicated panic disorder. *British Journal of Clinical Psychology*, *55*(3), 253-268. https://doi.org/10.1111/bjc.12093

Lam, D. C. K., Poplavskaya, E. V., Salkovskis, P. M., Hogg, L. I., & Panting, H. (2016a). An experimental Investigation of the Impact of Personality Disorder Diagnosis on Clinicians: Can We See Past the Borderline? *Behavioural and Cognitive Psychotherapy*, *44*(3), 361-373. https://doi.org/10.1017/S1352465815000351

Linden, A., Best, L., Elise, F., Roberts, D., Branagan, A., Tay, Y. B. E., Crane, L., Cusack, J., Davidson, B., Davidson, I., Hearst, C., Mandy, W., Rai, D., Smith, E., & Gurusamy, K. (2023). Benefits and harms of interventions to improve anxiety, depression, and other mental health outcomes for autistic people: A systematic review and network meta-analysis of randomised controlled trials. *Autism*, *27*(1), 7-30. https://doi.org/10.1177/13623613221117931

Markham, D. (2003). Attitudes towards patients with a diagnosis of 'borderline personality disorder': Social rejection and dangerousness. *Journal of Mental Health*, *12*(6), 595-612. https://doi.org/10.1080/09638230310001627955

Markham, D., & Trower, P. (2003). The effects of the psychiatric label 'borderline personality disorder' on nursing staff's perceptions and causal attributions for challenging behaviours. *British Journal of Clinical Psychology*, *42*(3), 243-256. https://doi.org/https://doi.org/10.1348/01446650360703366

Matthews, N. L., Ly, A. R., & Goldberg, W. A. (2015). College Students' Perceptions of Peers with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, *45*(1), 90-99. https://doi.org/10.1007/s10803-014-2195-6

Mazurek, M. O. (2018). Anxiety in adolescents and adults with autism spectrum disorder. In *Adolescents with autism spectrum disorder: A clinical handbook.* (pp. 91-116). Oxford University Press. https://doi.org/10.1093/med-psych/9780190624828.003.0004

Menezes, M., Harkins, C., Robinson, M. F., Pappagianopoulos, J., Cross, R., Vasa, R. A., & Mazurek, M. O. (2022). Treatment of anxiety in autistic adults: A systematic review. *Research in Autism Spectrum Disorders*, *99*, 102068. https://doi.org/https://doi.org/10.1016/j.rasd.2022.102068

Milner, V., Colvert, E., Hull, L., Cook, J., Ali, D., Mandy, W., & Happé, F. (2024). Does camouflaging predict age at autism diagnosis? A comparison of autistic men and women. Autism Res, 17(3), 626-636. https://doi.org/10.1002/aur.3059

Morris, R., Greenblatt, A., & Saini, M. (2019). Healthcare Providers' Experiences with Autism: A Scoping Review. *Journal of Autism and Developmental Disorders*, *49*(6), 2374-2388. https://doi.org/10.1007/s10803-019-03912-6

National Institute for Health and Care Excellence. (2025). *Autism in Adults: How common is it?* . Retrieved April 2025 from https://cks.nice.org.uk/topics/autism-in-adults/background-information/prevalence/

NICE. (2011, 15 June 2020). *Generalised anxiety disorder and panic disorder in adults: management. CG: 113.* National Institute for Health and Care Excellence. https://www.nice.org.uk/guidance/cg113

NICE. (2012, 14 June 2021). *Autism spectrum disorder in adults: diagnosis and management. CG: 142*. National Institute for Health and Care Excellence. https://www.nice.org.uk/guidance/CG142/chapter/Recommendations#interventions-for-coexisting-mental-disorders

Nimmo-Smith, V., Heuvelman, H., Dalman, C., Lundberg, M., Idring, S., Carpenter, P., Magnusson, C., & Rai, D. (2020). Anxiety Disorders in Adults with Autism Spectrum Disorder: A Population-Based Study. *Journal of Autism and Developmental Disorders*, *50*(1), 308-318. https://doi.org/10.1007/s10803-019-04234-3

Norris, J. E., Prosser, R., Remington, A., Crane, L., & Maras, K. (2024). Disclosing an autism diagnosis improves ratings of candidate performance in employment interviews. *Autism*, *28*(4), 1045-1050. https://doi.org/10.1177/13623613231203739

O'Connor, C., Burke, J., & Rooney, B. (2020). Diagnostic Disclosure and Social Marginalisation of Adults with ASD: Is There a Relationship and What Mediates It? *Journal of Autism and Developmental Disorders*, *50*(9), 3367-3379. https://doi.org/10.1007/s10803-019-04239-y

O'Nions, E., McKechnie, D. G., Long, C., Mandy, W., & Stott, J. (2023a). How can autistic adults be supported in primary care? *British Journal General Practice*, *73*(736), 518-521. https://doi.org/10.3399/bjgp23X735525

O'Nions, E., Petersen, I., Buckman, J. E. J., Charlton, R., Cooper, C., Corbett, A., Happé, F., Manthorpe, J., Richards, M., Saunders, R., Zanker, C., Mandy, W., & Stott, J. (2023). Autism in England: assessing underdiagnosis in a population-based cohort study of prospectively collected primary care data.

The Lancet Regional Health – Europe, *29*. https://doi.org/10.1016/j.lanepe.2023.100626

Ohan, J. L., Ellefson, S. E., & Corrigan, P. W. (2015). Brief Report: The Impact of Changing from DSM-IV 'Asperger's' to DSM-5 'Autistic Spectrum Disorder' Diagnostic Labels on Stigma and Treatment Attitudes. *Journal of Autism and Developmental Disorders*, *45*(10), 3384-3389. https://doi.org/10.1007/s10803-015-2485-7

Otte, C. (2011). Cognitive behavioral therapy in anxiety disorders: current state of the evidence. *Dialogues in Clinical Neuroscience*, *13*(4), 413-421. https://doi.org/10.31887/DCNS.2011.13.4/cotte

Perihan, C., Burke, M., Bowman-Perrott, L., Bicer, A., Gallup, J., Thompson, J., & Sallese, M. (2020). Effects of Cognitive Behavioral Therapy for Reducing Anxiety in Children with High Functioning ASD: A Systematic Review and Meta-Analysis. *Journal of Autism and Developmental Disorders*, *50*(6), 1958-1972. https://doi.org/10.1007/s10803-019-03949-7

Priebe, S., & Gruyters, T. (1995). The importance of the first three days: Predictors of treatment outcome in depressed in-patients. *British Journal of Clinical Psychology*, *34*(2), 229-236.

Qian, J., Wu, Y., Liu, F., Zhu, Y., Jin, H., Zhang, H., Wan, Y., Li, C., & Yu, D. (2022). An update on the prevalence of eating disorders in the general population: a systematic review and meta-analysis. Eat Weight Disord, 27(2), 415-428. https://doi.org/10.1007/s40519-021-01162-z

Robertson, D., Clear, D., Carey, C., Marshall-Tate, K., Bernard, S., Oxley, C., Sappok, T., Hare, D., Blainey, S., & Russell, A. (2019). *A clinician's guide to*

mental health conditions in adults with autism spectrum disorders: assessment and interventions. Jessica Kingsley Publishers.

Rodgers, J., & Ofield, A. (2018). Understanding, Recognising and Treating Co-occurring Anxiety in Autism. *Current Developmental Disorders Reports*, *5*(1), 58-64. https://doi.org/10.1007/s40474-018-0132-7

Ruscio, J. (2004). Diagnoses and the Behaviors They Denote: A Critical Evaluation of the Labeling Theory of Mental Illness. *The Scientific Review of Mental Health Practice: Objective Investigations of Controversial and Unorthodox Claims in Clinical Psychology, Psychiatry, and Social Work*, *3*, 5-22.

Soh, N. L.-W., & Walter, G. (2013). Publications on cross-cultural aspects of eating disorders. Journal of Eating Disorders, 1(1), 4. https://doi.org/10.1186/2050-2974-1-4

Spain, D., & Happé, F. (2020). How to Optimise Cognitive Behaviour Therapy (CBT) for People with Autism Spectrum Disorders (ASD): A Delphi Study. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, *38*(2), 184-208. https://doi.org/10.1007/s10942-019-00335-1

Spain, D., Milner, V., Mason, D., Iannelli, H., Attoe, C., Ampegama, R., Kenny, L., Saunders, A., Happé, F., & Marshall-Tate, K. (2023). Improving Cognitive Behaviour Therapy for Autistic Individuals: A Delphi Survey with Practitioners. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, *41*(1), 45-63. https://doi.org/10.1007/s10942-022-00452-4

Sukhodolsky, D. G., Bloch, M. H., Panza, K. E., & Reichow, B. (2013). Cognitive-Behavioral Therapy for Anxiety in Children With High-Functioning Autism: A Meta-analysis. *Pediatrics*, *132*(5), e1341-e1350. https://doi.org/10.1542/peds.2013-1193

Swift, J., Derthick, A., & Tompkins, K. (2018). The Relationship Between Trainee Therapists' and Clients' Initial Expectations and Actual Treatment Duration and Outcomes. *Practice Innovations*, *3*. https://doi.org/10.1037/pri0000065

Turnock, A., Langley, K., & Jones, C. R. G. (2022). Understanding Stigma in Autism: A Narrative Review and Theoretical Model. *Autism Adulthood*, *4*(1), 76-91. https://doi.org/10.1089/aut.2021.0005

UKCP. (2023). *UKCP 2023 Member Survey Report* UK Council for Psychotherapy. https://www.psychotherapy.org.uk/media/2dfb1l55/2023-ukcp-member-survey-report.pdf?utm_source=chatgpt.com

Ung, D., Selles, R., Small, B. J., & Storch, E. A. (2015). A Systematic Review and Meta-Analysis of Cognitive-Behavioral Therapy for Anxiety in Youth with High-Functioning Autism Spectrum Disorders. *Child Psychiatry & Human Development*, *46*(4), 533-547. https://doi.org/10.1007/s10578-014-0494-y

Weston, L., Hodgekins, J., & Langdon, P. E. (2016). Effectiveness of cognitive behavioural therapy with people who have autistic spectrum disorders: A systematic review and meta-analysis. *Clinical Psychology Review*, *49*, 41-54. https://doi.org/https://doi.org/10.1016/j.cpr.2016.08.001

White, S. W., Simmons, G. L., Gotham, K. O., Conner, C. M., Smith, I. C., Beck, K. B., & Mazefsky, C. A. (2018). Psychosocial Treatments Targeting Anxiety and Depression in Adolescents and Adults on the Autism Spectrum: Review of the Latest Research and Recommended Future Directions. *Current Psychiatry Reports*, *20*(10), 82. https://doi.org/10.1007/s11920-018-0949-0

Zerbo, O., Massolo, M. L., Qian, Y., & Croen, L. A. (2015). A Study of Physician Knowledge and Experience with Autism in Adults in a Large Integrated

Healthcare System. *Journal of Autism and Developmental Disorders*, *45*(12), 4002-4014. https://doi.org/10.1007/s10803-015-2579-2

EXECUTIVE SUMMARY

Why this research was conducted: Autism is one of the most common neurodevelopmental disorders, with estimated prevalence rates of 1.1% of adults in the UK. It is suggested that autism in adults is underdiagnosed relative to prevalence rates in children (1-3%). Anxiety disorders are particularly common in those with autism relative to the general population and can lead to impairment in functioning and negatively impact quality of life.

Previous research has supported the use of CBT interventions in the treatment of anxiety disorders in autistic people, with indications that adaptations may enhance effectiveness. Although there is no evidence that autism renders CBT ineffective or that specific adaptions are necessary, autistic people often face barriers to accessing mental health support. These barriers may include clinicians' belief that that highly specialist adaptations are required in order for treatment to be effective, potentially leading to pessimism regarding treatment prospects.

Clinician expectations and optimism for treatment have been linked to more positive treatment outcomes; previous research in clinical populations of individuals with borderline personality disorder have found that diagnostic labelling can impact clinicians' attitudes.

The current study aimed to evaluate if clinicians' judgements about a patient presenting with anxiety were influenced by suggested autistic traits. It was hypothesised that the autism diagnostic label would adversely affect mental health professionals' clinical expectations of a patient being assessed for

treatment of an anxiety disorder, relative both to no information and descriptive information indicative of autism.

What the research involved: An experimental design was utilised to investigate these aims. 106 clinicians took part in the study. Clinicians were qualified mental health professionals working from the UK. They were recruited through social media, emails, flyers and through snowball sampling.

Clinicians were allocated to one of three conditions providing different levels of referral information; that is, a benchmark condition where clinicians were provided with basic background information with no mention of autism, an autistic traits condition where they were provided with the background information and a history of behavioural and social features consistent with autism, and a suspected diagnosis condition where the information provided suggested assessment for autism might be helpful. All of the clinicians watched the same vignette of a woman attending for initial CBT assessment of anxiety and then responded to measures related to expectations, engagement, optimism and pessimism of ongoing treatment. They also provided demographic information relating to themselves and their professional qualifications. Clinicians were also asked to rate their perception of different treatment modality effectiveness.

The data collected were analysed using SPSS. One-way ANOVA and chi-square analyses were used to examine demographic characteristics across experimental groups. Clinicians' perceptions of anxiety treatment modality effectiveness, clinicians' expectations and optimistic versus pessimistic responses were analysed using mixed-model ANOVAs.

What the research found: The findings found no differences between conditions across all measures of engagement, expectations or optimism vs pessimism, suggesting the autism label did not significantly influence clinicians' perceptions. Results did show a that overall, clinicians endorsed more optimistic than pessimistic expectations for therapy across conditions. Clinicians also endorsed CBT as the most effective treatment for anxiety.

Conclusion: The findings of this study suggest clinicians do not assume worse outcomes for autistic people, which is positive. This also aligns with previous research in the general population which suggest that presence of an autism label does not impact individuals' perceptions. However, findings could also reflect clinicians limited knowledge of autism and potential impacts on therapy. Limitations of the study include use of actors in the vignette, the use of unvalidated measures and that the present study was limited to clinicians residing in the UK. Clinically we need to ensure that professionals have appropriate knowledge and skills to work effectively with this population. Future research should explore why clinicians' expectations do not differ and if these expectations align with autistic people's perceptions of therapy.

CONNECTING NARRATIVE

The process of conceptualising, designing and completing the projects included in this thesis has been one of the most challenging aspects of my academic and professional career so far. I came to the course after a number of years away from academics and research. I felt very unskilled and unsure of my research interests. Through the process I have found my confidence return and even a like for research.

While the three projects differ in scope and focus on different populations, they all incorporate some aspect of clinician responsibility which I have reflected a lot on in my journey to and during professional training. We often hear about clients “not engaging” in services or treatment but I think it is more important we ask ourselves as clinicians what barriers those clients are facing to engage and what we can do to make support more accessible. I think this viewpoint and narrative has shifted since I first began my studies in psychology 13 years ago but as a profession, we still have a way to go. While my TDRP focuses specifically on clinician factors, it also is an important aspect of my SIP and SRL.

Systematic Review of the Literature

The idea for my SRL came from my time at a specialised anxiety disorder CAMHS placement in my second year of training after a number of other potential projects had fallen through. During a preparation for a social anxiety group

intervention, I noted that some of the participants also struggled with some eating difficulties. I had not been aware of the relationships between social anxiety and eating disorders prior to this but my attention was drawn to it from conversations during clinical supervision. I was surprised that a systematic review had not been completed for young people to date given how relatively common these presentations were in that cohort.

Completing this project, I was surprised at the scope of literature in the area, with lots of research regarding symptoms in the area but little with clinical populations of young people with ED. I quickly learned the importance of having clearly defined research questions to be able to produce a coherent review leading to meaningful conclusions. I hope this project contributes to understanding the co-occurrence of both social anxiety and eating disorders in young people and highlights the need for more specific studies in the future. I was very pleased to learn that the work on this project had inspired thoughts around a project being completed by a trainee in later cohorts and my SRL supervisor.

Service Improvement Project

The SIP was developed in collaboration with the Spires Cleft Centre, and I was particularly drawn to it having a lot of experience working with parents pre-training and seeing the impact caring for their children had on them. This project came with many challenges, primarily systemic rather than research based. There were a number of issues including obtaining honorary contracts and

permissions for the project within the trust, resourcing on the Spires team and staff changeover which made progress difficult. Some of these difficulties have led to changes within the course and trust processes which I hope will benefit trainees in the future. I think this project gave me an insight into the challenges of completing research within NHS settings which will inform the way I approach projects in services once qualified.

Completing the project was my first experience of qualitative research and with this came a lot of uncertainty and questioning of whether I was doing it right. I noticed my clinical skills really helped when completing interviews with the parents but that I had to be boundaried in my role as researcher and not therapist. I found supervision and utilising a reflective journal really helpful for helping me become aware of my own bias when completing the thematic analysis. I also found it helpful to share some of my reflections with friends who work in paediatric settings in different areas of the world, and this sparked some interesting conversations regarding the ubiquity of some of themes across settings and internationally.

Theory Driven Research Project

The broad concept of this idea was shared with trainees in first year via email and it piqued my interest. It reminded me of many conversations I had with neurodiverse clients pre-training who had felt misunderstood and excluded from services and I wanted to understand the role clinicians play in this. This project

was arguably the most challenging project I had, particularly when it came to recruitment. While I thought it would be relatively easy to recruit clinicians, it was not. Reflecting on this now I think the reasons for this are multifaceted. I wonder if it is reflective of how stretched clinicians are that additional tasks are not possible. It was also particularly difficult as I did not have any professional relationships in the UK having moved here to start the course. I really had to push myself to approach people I didn't know to ask them to complete the research or support me with recruitment. I found this particularly difficult as I felt a lot of anxiety about "bothering people" but was met with general kindness and willingness to help. I am also particularly grateful to a neurodiverse clinician who so graciously helped with my PPI and was able to provide such valuable insight that really helped me shape the project.

Overall Reflections

I am proud that I have managed to produce this thesis. The idea of it terrified me in first year but task by task, it became less daunting, and I even felt competent at times. It was difficult trying to balance the research workload, alongside course responsibilities and generally living but I've much better organisational skills now too. I have learned a lot working through the process, from PAS, to ethical approval, learning new research skills and reacquainting myself with old ones. I have realised there is no "perfect" way to do research but there's lots of ways to do it well.

ACKNOWLEDGEMENTS

First and foremost, I would like to thank all the people who kindly shared their time and experience to participate in these projects. Also, to those involved with lived experience who took part in the Patient and Public Involvement process during design of the research, thank you for your openness and honesty.

I am hugely grateful for the support of my research supervisors – Prof. Paul Salkovskis, Dr. Jo Adams and Dr. Matt Hotton. Thank you so much for your patience and guidance through all the ups and downs of each of these projects. I came to the course after several years away from research and you have really helped rebuild my confidence and supported me to develop my skills. To Dr. Jenny Cropper and Dr. Katie Hamilton who supported my research at the Spires Cleft Service, your expertise and insight has been invaluable throughout this process.

To all those who helped with recruitment for both my SIP and TDRP. Halena, Olivia and Anna at Spires, who so graciously took time out of their busy schedules to contact parents for my project. To Dr. Saarim Aslam and Fiona Symington for all your help with recruitment for my TDRP. Also, to Dr. Eloise Stark for your help with recruitment and for all your help during the development of the TDRP.

Thank you to my course tutors over the years, Dr. Nigel King and Dr. Alex Lau-Zhu and to Prof. Paul Salkovskis (again) for your patience and encouragement over the last 18 months.

A massive thank you to the 2022 Oxford DClin cohort, it has been wonderful to have such a supportive community over the past three years. I am so excited to what the future brings for everyone.

To all my fabulous Oxford friends, forever my favourite part of training. It's been a journey, but we are almost there. Thank you for your support, the laughs and the understanding as we've all tried to navigate our way through. Here's to finding our post-training sparkle.

To everyone at home, go raibh míle maith agat. To my family for always being my biggest supporters and making home a place I will always want to return to. To my home girls, it has been a privilege to grow up alongside you. I'm so grateful for the way you've shown up for me, time and time again. To all my Irish pals, who have consistently cheered me on and facilitated pockets of joy when I most needed them over the past three years. Lastly, to Kev, who came in later in the day, got me at my worst and loved me anyways. Thank you for being the safe space I've needed.

APPENDICES

Appendix A – Instructions to Author for SRL

About the journal

Aims and scope

Clinical Psychology Review publishes substantive reviews of topics germane to **clinical psychology**. Papers cover diverse issues including: psychopathology, psychotherapy, behavior therapy, cognition and cognitive therapies, behavioral medicine, community mental health, assessment, and child development. Papers should be cutting edge and advance the science and/or practice of clinical psychology.

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- Provide a link to your dataset when prompted during the online submission process.
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Reference to a journal publication with an article number:

Van der Geer, J., Handgraaf, T., & Lupton, R. A. (2022). The art of writing a scientific article. *Heliyon, 19,* Article e00205. https://doi.org/10.1016/j.heliyon.2022.e00205.

Reference to a book:

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Reference to a dataset:

Oguro, M., Imahiro, S., Saito, S., & Nakashizuka, T. (2015). Mortality data for Japanese oak wilt disease and surrounding forest compositions [dataset]. *Mendeley Data, v1.* https://doi.org/10.17632/xwj98nb39r.1.

Reference to a conference paper or poster presentation:

Engle, E.K., Cash, T.F., & Jarry, J.L. (2019, November). *The Body Image Behaviours Inventory-3: Development and validation of the Body Image Compulsive Actions and Body Image Avoidance Scales.* Poster session presentation at the meeting of the Association for Behavioural and Cognitive Therapies, New York, NY.

Reference to software:

Coon, E., Berndt, M., Jan, A., Svyatsky, D., Atchley, A., Kikinzon, E., Harp, D., Manzini, G., Shelef, E., Lipnikov, K., Garimella, R., Xu, C., Moulton, D., Karra, S., Painter, S., Jafarov, E., & Molins, S. (2020). *Advanced Terrestrial Simulator (ATS) (Version 0.88) [Computer software].* Zenodo. https://doi.org/10.5281/zenodo.3727209.

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Appendix B – SRL Search Strategy developed with librarians at University of Oxford and Oxford NHS Foundation Trust

What is the prevalence of **SAD** in children and young people with ED and ED symptoms, and what are the patterns of comorbidity between these conditions as reported in the existing literature?

"Eating Disorder*" OR "Disordered eat*" OR Anorexi* OR "Bulimia nervosa" OR Bulimi* OR "Binge eat* disorder*" OR "Body dissatisf*" OR "Other specified eat* disorder*" OR "Eat* disorder* not otherwise specified" OR "Other specified eat* disorder*" OR "Other specified feed* disorder*" OR "Appetite disorder*" OR "Feeding disorder*" OR "Nutritional disorder*" OR "Food-related disorder*" OR "Food Related Disorder*" OR "Eating patholog*" OR "Abnormal eating behavio*" OR "Disordered nutrition" OR "Psychogenic eating disorder*" OR "Disordered eating pattern*" OR "Eat* dysfunction*" OR "Eating behavio* disorder*" OR Orthorexi* OR "Other specified feeding or eating disorder*" OR OSFED OR Purging OR Purge* OR "Binge Eat*" OR "Emotional Eat*" OR "Food Addict*" OR "Stress* Eat*" OR "Eating Behavio*" OR "Eating Attitude*" OR "Body Image"

AND

"Social Anxiety Disorder*" OR "Social* phobi*" OR "Social Anxiet*" OR "Social fear*" OR "Social avoidance disorder*" OR "Interpersonal anxiet*" OR "Fear of social situation*" OR "Social* apprehensi*" OR "Performance anxiet*" OR Shy* OR Timid*

AND

Youth* OR Teen* OR "Young adult*" OR "Young people" OR Young OR Child* OR Minor* OR Pubescen* OR Juvenile* OR Adolescen* OR "Young person*" OR Boy* OR Girl* OR Schoolchild* OR Pediatric* OR Paediatric* OR "College Student*" OR "Uni* Student*" OR "Sixth Form Student*"

Terms considered but excluded:

BED

SAD

ED

Screening Process: (not needed in search strategy)

AND

(“Co-morbitiy” OR "Concurrent condition" OR "Co-occurring condition" OR "Co-existing disorder" OR "Dual diagnos*" OR "Co-morbid condition" OR "Multiple condition*" OR "Co-occurring illness*" OR "Secondary condition" OR "Associated disorder*")

AND

(“Prevalence” OR "Frequency" OR "Commonness" OR "Occurrence" OR "Incidence" OR "Rate" OR "Pervasiveness" OR "Ubiquit*" OR "Predominance")

Appendix C – SRL Search strategy for individual databases

CINAHL SEARCH

Search Strategy

20 S17 AND S18 AND S19

S19 S13 OR S14

S18 S12 OR S15

S17 S11 OR S16

S16 (MH "Eating Disorders") OR (MH "Binge Eating Disorder")
OR (MH "Feeding and Eating Disorders of Childhood")
OR (MH "Disordered Eating Behavior") OR (MH "Bulimia
Nervosa") OR "Eating disorder"

S15 (MH "Social Anxiety Disorders") OR "Social Anxiety"

S14 (MH "Adolescence") OR "Youth"

S13 TI (Youth* or Teen* or "Young adult*" or "Young people"
or Young or Child* or Minor* or Pubescen* or Juvenile* or
Adolescen* or "Young person*" or Boy* or Girl* or

Schoolchild* or Pediatric* or Paediatric* or "College Student*" or "Uni* Student*" or "Sixth Form Student*") AND AB (Youth* or Teen* or "Young adult*" or "Young people" or Young or Child* or Minor* or Pubescen* or Juvenile* or Adolescen* or "Young person*" or Boy* or Girl* or Schoolchild* or Pediatric* or Paediatric* or "College Student*" or "Uni* Student*" or "Sixth Form Student*")

S12 TI ("Social Anxiety Disorder*" OR "Social* phobi*" OR "Social Anxiet*" OR "Social fear*" OR "Social avoidance disorder*" OR "Interpersonal anxiet*" OR "Fear of social situation*" OR "Social* apprehensi*" OR "Performance anxiet*" OR Shy* OR Timid*) OR AB ("Social Anxiety Disorder*" OR "Social* phobi*" OR "Social Anxiet*" OR "Social fear*" OR "Social avoidance disorder*" OR "Interpersonal anxiet*" OR "Fear of social situation*" OR "Social* apprehensi*" OR "Performance anxiet*" OR Shy* OR Timid*)

S11 AB ("Eating Disorder*" OR "Disordered eat*" OR Anorexi* OR "Bulimia nervosa" OR Bulimi* OR "Binge eat* disorder*" OR "Body dissatisf*" OR "Other specified eat* disorder*" OR "Eat* disorder* not otherwise specified" OR "Other specified eat* disorder*" OR "Other

specified feed* disorder*" OR "Appetite disorder*" OR "Feeding disorder*" OR "Nutritional disorder*" OR "Food-related disorder*" OR "Food Related Disorder*" OR "Eating patholog*" OR "Abnormal eating behavio*" OR "Disordered nutrition" OR "Psychogenic eating disorder*" OR "Disordered eating pattern*" OR "Eat* dysfunction*" OR "Eating behavio* disorder*" OR Orthorexi* OR "Other specified feeding or eating disorder*" OR OSFED OR Purging OR Purge* OR "Binge Eat*" OR "Emotional Eat*" OR "Food Addict*" OR "Stress* Eat*" OR "Eating Behavio*" OR "Eating Attitude*" OR "Body Image") OR TI ("Eating Disorder*" OR "Disordered eat*" OR Anorexi* OR "Bulimia nervosa" OR Bulimi* OR "Binge eat* disorder*" OR "Body dissatisf*" OR "Other specified eat* disorder*" OR "Eat* disorder* not otherwise specified" OR "Other specified eat* disorder*" OR "Other specified feed* disorder*" OR "Appetite disorder*" OR "Feeding disorder*" OR "Nutritional disorder*" OR "Food-related disorder*" OR "Food Related Disorder*" OR "Eating patholog*" OR "Abnormal eating behavio*" OR "Disordered nutrition" OR "Psychogenic eating disorder*" OR "Disordered eating pattern*" OR "Eat* dysfunction*" OR "Eating behavio* disorder*" OR Orthorexi* OR "Other specified feeding or eating disorder*" OR OSFED OR Purging OR Purge* OR "Binge Eat*" OR "Emotional Eat*" OR "Food Addict*" OR

"Stress* Eat*" OR "Eating Behavio*" OR "Eating Attitude*"

OR "Body Image")

EMBASE SEARCH

Search Strategy:

1 ("Eating Disorder*" or "Disordered eat*" or Anorexi* or "Bulimia nervosa" or Bulimi* or "Binge eat* disorder*" or "Body dissatisf*" or "Other specified eat* disorder*" or "Eat* disorder* not otherwise specified" or "Other specified eat* disorder*" or "Other specified feed* disorder*" or "Appetite disorder*" or "Feeding disorder*" or "Nutritional disorder*" or "Food-related disorder*" or "Food Related Disorder*" or "Eating patholog*" or "Abnormal eating behavio*" or "Disordered nutrition" or "Psychogenic eating disorder*" or "Disordered eating pattern*" or "Eat* dysfunction*" or "Eating behavio* disorder*" or Orthorexi* or "Other specified feeding or eating disorder*" or OSFED or Purging or Purge* or "Binge Eat*" or "Emotional Eat*" or "Food Addict*" or "Stress* Eat*" or "Eating Behavio*" or "Eating Attitude*" or "Body Image").ab,kw,ti. (137147)

2 eating disorder/ or anorexia nervosa/ or binge eating disorder/ or bulimia/ or emotional eating/ or orthorexia/ or purging disorder/ (66259)

3 body dissatisfaction/ or body image/ (29706)

4 1 or 2 or 3 (160364)

5 ("Social Anxiety Disorder*" or "Social* phobi*" or "Social Anxiet*" or "Social fear*" or "Social avoidance disorder*" or "Interpersonal anxiet*" or "Fear of social situation*" or "Social* apprehensi*" or "Performance anxiet*" or Shy* or Timid*).ab,kw,ti. (22442)

6 social phobia/ (15900)

7 performance anxiety/ (555)

8 shyness/ (668)

9 5 or 6 or 7 or 8 (29387)

10 (Youth* or Teen* or "Young adult*" or "Young people" or Young or Child* or Minor* or Pubescen* or Juvenile* or Adolescen* or "Young person*" or Boy* or Girl* or Schoolchild* or Pediatric* or Paediatric* or "College Student*" or "Uni* Student*" or "Sixth Form Student*").ab,kw,ti. (4120177)

11 juvenile/ or adolescent/ or child/ (3298783)

12 10 or 11 (5325964)

13 4 and 9 and 12 (828)

MEDLINE SEARCH

Search Strategy:

1 ("Eating Disorder*" or "Disordered eat*" or Anorexi* or "Bulimia nervosa" or Bulimi* or "Binge eat* disorder*" or "Body dissatisf*" or "Other specified eat* disorder*" or "Eat* disorder* not otherwise specified" or "Other specified eat* disorder*" or "Other specified feed* disorder*" or "Appetite disorder*" or "Feeding disorder*" or "Nutritional disorder*" or "Food-related disorder*" or "Food Related Disorder*" or "Eating patholog*" or "Abnormal eating behavio*" or "Disordered nutrition" or "Psychogenic eating disorder*" or "Disordered eating pattern*" or "Eat* dysfunction*" or "Eating behavio* disorder*" or Orthorexi* or "Other specified feeding or eating disorder*" or OSFED or Purging or Purge* or "Binge Eat*" or "Emotional Eat*" or "Food Addict*" or "Stress* Eat*" or "Eating Behavio*" or "Eating Attitude*" or "Body Image").ab,kw,ti. (101885)

2 "feeding and eating disorders"/ or anorexia nervosa/ or binge-eating disorder/ or bulimia nervosa/ or "feeding and eating disorders of childhood"/ or orthorexia nervosa/ (36526)

3 body image/ or body dissatisfaction/ (21014)

4 1 or 2 or 3 (116645)

5 ("Social Anxiety Disorder*" or "Social* phobi*" or "Social Anxiet*" or "Social fear*" or "Social avoidance disorder*" or "Interpersonal anxiet*" or "Fear of social situation*" or "Social* apprehensi*" or "Performance anxiet*" or Shy* or Timid*).ab,kw,ti. (17256)

6 Phobia, Social/ (1440)

7 Performance Anxiety/ (180)

8 Shyness/ (674)

9 5 or 6 or 7 or 8 (17562)

10 (Youth* or Teen* or "Young adult*" or "Young people" or Young or Child* or Minor* or Pubescen* or Juvenile* or Adolescen* or "Young person*" or Boy* or Girl* or Schoolchild* or Pediatric* or Paediatric* or "College Student*" or "Uni* Student*" or "Sixth Form Student*").ab,kw,ti. (3246931)

11 adolescent/ or child/ (3284072)

12 10 or 11 (4928009)

13 4 and 9 and 12 (329)

PSYCHINFO SEARCH

Search Strategy:

1 ("Eating Disorder*" or "Disordered eat*" or Anorexi* or "Bulimia nervosa" or

Bulimi* or "Binge eat* disorder*" or "Body dissatisf*" or "Other specified eat* disorder*" or "Eat* disorder* not otherwise specified" or "Other specified eat* disorder*" or "Other specified feed* disorder*" or "Appetite disorder*" or "Feeding disorder*" or "Nutritional disorder*" or "Food-related disorder*" or "Food Related Disorder*" or "Eating patholog*" or "Abnormal eating behavio*" or "Disordered nutrition" or "Psychogenic eating disorder*" or "Disordered eating pattern*" or "Eat* dysfunction*" or "Eating behavio* disorder*" or Orthorexi* or "Other specified feeding or eating disorder*" or OSFED or Purging or Purge* or "Binge Eat*" or "Emotional Eat*" or "Food Addict*" or "Stress* Eat*" or "Eating Behavio*" or "Eating Attitude*" or "Body Image").ab,id,ti. (69755)

2 eating disorders/ or anorexia nervosa/ or binge eating disorder/ or feeding disorders/ or orthorexia/ or "purging (eating disorders)"/ or binge eating/ or eating behavior/ or emotional eating/ or food addiction/ (50537)

3 body dissatisfaction/ or body image/ (14633)

4 1 or 2 or 3 (81635)

5 ("Social Anxiety Disorder*" or "Social* phobi*" or "Social Anxiet*" or "Social fear*" or "Social avoidance disorder*" or "Interpersonal anxiet*" or "Fear of social situation*" or "Social* apprehensi*" or "Performance anxiet*" or Shy* or Timid*).ab,id,ti. (22977)

6 social phobia/ or social anxiety/ or social anxiety disorder/ (10931)

7 performance anxiety/ (656)

8 timidity/ (1672)

9 5 or 6 or 7 or 8 (23817)

10 (Youth* or Teen* or "Young adult*" or "Young people" or Young or Child* or Minor* or Pubescen* or Juvenile* or Adolescen* or "Young person*" or Boy* or

Girl* or Schoolchild* or Pediatric* or Paediatric* or "College Student*" or "Uni* Student*" or "Sixth Form Student*").ab,id,mh,sh,ti. (1736765)

11 4 and 9 and 10 (405)

SCOPUS SEARCH

Search Strategy

(TITLE-ABS-KEY ("Eating Disorder*" OR "Disordered eat*" OR anorexi* OR "Bulimia nervosa" OR bulimi* OR "Binge eat* disorder*" OR "Body dissatisf*" OR "Other specified eat* disorder*" OR "Eat* disorder* not otherwise specified" OR "Other specified eat* disorder*" OR "Other specified feed* disorder*" OR "Appetite disorder*" OR "Feeding disorder*" OR "Nutritional disorder*" OR "Food-related disorder*" OR "Food Related Disorder*" OR "Eating patholog*" OR "Abnormal eating behavio*" OR "Disordered nutrition" OR "Psychogenic eating disorder*" OR "Disordered eating pattern*" OR "Eat* dysfunction*" OR "Eating behavio* disorder*" OR orthorexi* OR "Other specified feeding or eating disorder*" OR osfed OR purging OR purge* OR "Binge Eat*" OR "Emotional Eat*" OR "Food Addict*" OR "Stress* Eat*" OR "Eating Behavio*" OR "Eating Attitude*" OR "Body Image")) AND (TITLE-ABS-KEY ("Social Anxiety Disorder*" OR "Social* phobi*" OR "Social Anxiet*" OR "Social fear*" OR "Social avoidance disorder*" OR "Interpersonal anxiet*" OR "Fear of social situation*" OR "Social* apprehensi*" OR "Performance anxiet*" OR shy* OR timid*)) AND (TITLE-ABS-KEY (youth* OR teen* OR "Young adult*" OR "Young people" OR young OR child* OR minor* OR pubescen* OR juvenile* OR adolescen* OR

"Young person*" OR boy* OR girl* OR schoolchild* OR pediatric* OR paediatric* OR "College Student*" OR "Uni* Student*" OR "Sixth Form Student*"))

Appendix D – SRL Standardised data extraction template

	Study	Country	Sample (N)	Mean Age (Range)	Mean (SD) SA Score	Measure	Mean (SD) ED Score	Measure	BMI	Gender	Ethnicity	Recruitment Source	Design	Findings
1														
2														

Appendix E – SRL Standard Quality Assessment Criteria Checklist (Kmet et al., 2004)

Criteria		Yes	Partial	No	N/A
1	Question/objective sufficiently described?				
2	Study design evident and appropriate?				
3	Method of subject/comparison group selection or source of information/input variables described and appropriate?				
4	Subject (and comparison group, if applicable) characteristics sufficiently described?				
5	If interventional and random allocation was possible, was it described?				
6	If interventional and blinding of investigators was possible, was it reported?				
7	If interventional and blinding of subjects was possible, was it reported?				
8	Outcome and (if applicable) exposure measure(s) well defined and robust to measurement / misclassification bias? Means of assessment reported?				
9	Sample size appropriate?				
10	Analytic methods described/justified and appropriate?				
11	Some estimate of variance is reported for the main results?				
12	Controlled for confounding?				
13	Results reported in sufficient detail?				
14	Conclusions supported by the results?				

Appendix F – SRL Results of Quality Analysis

Paper	Paper Name	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Total Score	Possible Score	Score	Categories
1	Spettigue et al. (2020)	2	2	2	1	N/A	N/A	N/A	1	2	2	1	0	2	1	16	22	0.727273	Medium
2	Gross & Rosen (1988)	2	1	1	2	N/A	N/A	N/A	2	2	2	2	1	2	2	19	22	0.863636	High
3	Delaquis et al. (2023)	2	1	1	1	N/A	N/A	N/A	2	2	2	2	0	2	2	17	22	0.772727	High
4	Garcia et al. (2020)	2	1	1	1	N/A	N/A	N/A	1	2	2	2	1	2	2	17	22	0.772727	High
5	Obeid et al. (2013)	2	1	2	1	N/A	N/A	N/A	2	2	2	1	0	2	2	17	22	0.772727	High
6	Ranta et al. (2017)	2	1	2	1	N/A	N/A	N/A	1	2	2	2	2	2	2	19	22	0.863636	High
7	Vardar et al. (2011)	2	1	1	1	N/A	N/A	N/A	1	2	2	2	1	2	2	17	22	0.772727	High
8	Mohamadirizi et al. (2014)	2	2	1	1	N/A	N/A	N/A	0	1	2	1	0	2	1	13	22	0.590909	Medium
9	Schulze et al. (2009)	2	1	1	1	N/A	N/A	N/A	1	1	2	2	0	1	2	14	22	0.636364	Medium
10	Dakanalis et al. (2016)	2	1	1	2	N/A	N/A	N/A	2	2	2	1	2	2	2	19	22	0.863636	High
11	Duclos et al. (2014)	2	1	2	1	N/A	N/A	N/A	2	2	2	2	0	2	2	18	22	0.818182	High
12	Mattar et al. (2012)	2	1	2	1	N/A	N/A	N/A	1	1	2	2	1	2	2	17	22	0.772727	High
13	Bucholz et al. (2007)	2	1	2	1	N/A	N/A	N/A	1	1	2	2	1	2	2	17	22	0.772727	High
14	Zonneyvlle-Bender et al. (2004)	2	1	2	1	N/A	N/A	N/A	2	1	1	2	2	2	2	18	22	0.818182	High
15	Ohmann et al. (2013)	2	1	2	1	N/A	N/A	N/A	1	1	2	2	2	2	1	17	22	0.772727	High
16	Courty et al. (2015)	2	1	2	1	N/A	N/A	N/A	1	2	2	2	2	2	2	19	22	0.863636	High
17	Mohammadi et al. (2020)	2	2	2	1	N/A	N/A	N/A	1	2	2	2	0	2	2	18	22	0.818182	High
																		0.780749	

Appendix G – Instructions to Author for SIP

Your article must be within the scope of the journal and be of sufficient quality. If not, it will not be reviewed. Please read the journal's Aims and Scope to see if your article is appropriate.

The manuscript must be your original work, you must have the rights to the work, and you must have obtained and be able to supply all necessary permissions for the reproduction of any copyright works not owned by you, including figures, illustrations, tables, lengthy quotations, or other material previously published elsewhere.

Article types

Please visit the Sage Journal Author Gateway for guidance on producing visual and/or video abstracts.

Research

PRISMA checklist

CONSORT checklist

Article type	Description	Requirements

Original Research	Reports of original clinical or basic science data pertaining to prevalence, causes, mechanisms, diagnosis, course, treatment, and prevention, including systematic reviews and meta-analysis that represent a new contribution to the field.
	
	Traditional, narrative reviews should also be considered in this category.
		• 7,000 words: Body of the manuscript (excluding abstract, references and figure captions)
		• ≤250-word strucutred abstract⁎ using the below headings:
		  ○ Objective
		  ○ Design
		  ○ Setting
		  ○ Patients, Participants
		  ○ Interventions
		  ○ Main Outcome Measure(s)
		  ○ Results
		  ○ Conclusions
		• Minimum of 3 keywords
		• ≤6 figures and tables, combined
		• For systematic reviews and meta-analysis, please follow the PRISMA checklist and include the checklist in your list of files upon submission
		• For Clinical Trials, please include the CONSORT flow chart as a cited figure and the completed CONSORT checklist should be uploaded with your submission
		
		⁎Narrative review articles may have an unstructured abstract

What I (We) Do	Introduce new problems to clinical problems. Novelty and quality of	• 1,000 words: Body of the manuscript (excluding abstract, references and figure captions) • ≤50-75-word structured abstract with the following

	illustrations and videos (when appropriate) are key ingredients. If no patient identifiable data are included, no IRB form is necessary.	format: background (what is the issue/problem), solution, what I/we did that is new • 3-5 keywords • ≤3 tables and figures, combined • ≤5 references
Case/Clinical Reports	Case reports presenting new clinical information.	• 4,000 words: Body of the manuscript (excluding abstract, references and figure captions) • ≤100-word unstructured abstract, describing the objective, essential features and uniqueness of the case being presented, and conclusions • Minimum of 3 keywords • ≤6 tables or figures, combined
Ethics/Health Policy	Ethical and Legal Reports are original articles which examine issues of ethics or law arising in cleft and craniofacial care and research.	• 3,000 words: Body of the manuscript (excluding abstract, references and figure captions) • ≤100-word unstructured abstract • Minimum of 3 keywords • ≤3 figures and tables, combined

	Health Policy Reports are original articles which examine social, political, and economic issues arising in cleft and craniofacial care or research.	

Brief Communications	Preliminary or limited results of original research pertaining to prevalence, causes, mechanisms, diagnosis, course, treatment, and prevention.	• 3,000 words: Body of the manuscript (excluding abstract, references and figure captions)
		• 150-word structured abstract using the below headings:
		  ○ Objective
		  ○ Design
		  ○ Setting
		  ○ Patients, Participants
		  ○ Interventions
		  ○ Main Outcome Measure(s)
		  ○ Results
		  ○ Conclusions
		• Minimum of 3 keywords
		• For non-data brief communications, ≤100-word unstructured abstract
		• ≤3 figures and tables, combined

Clinical review and education

Article type	Description	Requirements

Ideas and Innovations	Short communications related to novel ideas, techniques, methods of assessment, etc.	• 3,000 words: Body of the manuscript (excluding abstract, references and figure captions)
		• ≤250-word strucutred abstract⁎ using the below headings:
		  ○ Objective
		  ○ Design
		  ○ Setting
		  ○ Patients, Participants
		  ○ Interventions
		  ○ Main Outcome Measure(s)
		  ○ Results
		  ○ Conclusions
		• Minimum of 3 keywords
		• ≤3 figures and tables, combined

Opinion

Article type	Description	Requirements

Perspective	Perspectives are typically articles that provide background and context for an article in the issue in which they appear. Perspectives should provide thoughtful, scientific, constructive commentary pertaining to articles or research published in *The Cleft Palate-Craniofacial Journal*	• 1,500 words: Body of the manuscript (excluding abstract, references and figure captions) • ≤100-word unstrucutred abstract • ≤1 table or figure • Minimum of 3 keywords
Letter to the Editor	Comments in the form of letters that express differences of opinion or supporting views of recently published CPCJ content. They should provide thoughtful, scientific, constructive commentary.	• 1,500 words: Body of the manuscript (excluding abstract, references and figure captions) • ≤1 table or figure • Minimum of 3 keywords
Editorial	Brief substantiated commentaries on subjects of interest to the CPCJ readership. Editorials should be narrative in form and provide thoughtful, scientific, constructive commentary	• 1,500 words: Body of the manuscript (excluding abstract, references and figure captions) • ≤100-word unstrucutred abstract • ≤1 table or figure

	pertaining to articles or research published in *The Cleft Palate-Craniofacial Journal*	• Minimum of 3 keywords

Statistics

If a statistical analysis is conducted, explanation of the methods used must precede the Results section in the manuscript. Unusual or complex analysis methods should be referenced.

Units of Measure/ Abbreviations

The metric system is preferred for expressing units of measure. Abbreviations may be used for terms. The full term for each abbreviation should appear at its first use in the text, unless the abbreviation is a standard unit of measure. Abbreviations used in a table must be explained in a footnote below the table. For a list of standard abbreviations, consult the Council of Biology Editors Style Guide (available from the Council of Science Editors, 9650 Rockville Pike, Bethesda, MD 20814; http://www.councilscienceeditors.org) or other standard sources.

The table below lists standard accepted abbreviations for typical cleft-type classifications and study groups. Other abbreviations may be proposed for classifications and groups not listed.

CL	cleft lip (excludes (1) cleft lip and alveolus, (2) cleft lip and palate, and (3) cleft palate)
CP	cleft palate only (excludes (1) cleft lip and (2) cleft lip and palate)
CLP	cleft lip and palate (excludes (1) cleft lip and (2) cleft palate)
CL±P	cleft lip with or without cleft palate = cleft lip + cleft lip and palate (excludes cleft palate)
CP±L	cleft palate with or without cleft lip = cleft lip and palate + cleft palate (excludes cleft lip)
CL/P	cleft lip and/or cleft palate = cleft lip + cleft lip and palate + cleft palate (no exclusions)
CL±A	cleft lip with or without cleft alveolus = cleft lip + cleft lip and alveolus (excludes (1) cleft lip, (2) cleft lip and palate, and (3) cleft palate)

Modifying terms that may added to the abbreviations above include:

i (isolated)

I (incomplete)

U (unilateral)

B (bilateral)

SM (submucous)

Phonetic Symbols

Authors who use phonetic symbols are required to use Unicode-compliant fonts in their manuscripts. This will ensure the symbols display properly both during peer review and in the final published article. Examples of acceptable fonts include Charis SIL, Doulos SIL, and Gentium Unicode. Times New

Roman is also acceptable, as it includes most IPA symbols and is Unicode compliant.

Clinical trial registration

The journal conforms to the ICMJE requirement that clinical trials are registered in a WHO-approved public trials registry at or before the time of first participant enrollment as a condition of consideration for publication. The trial registry name and URL, and registration number must be included at the end of the abstract.

Reporting guidelines

Your manuscript **must** follow the relevant EQUATOR Network reporting guidelines, depending on the type of study. The EQUATOR wizard can help identify the appropriate guideline. You will need to upload the appropriate checklist with your submission.

Other resources can be found at NLM's Research Reporting Guidelines and Initiatives.

If your research involves animals, you will be asked to confirm that you have carefully read and adhered to the ARRIVE guidelines.

Formatting your manuscript

Accepted file types

The preferred format for your manuscript is Word. You do not need to follow a template, but please ensure your heading levels are clear, and the sections clearly defined.

The LaTeX files are also accepted. A LaTeX template is available on the Sage Journal Author Gateway.

Your article title, keywords, and abstract all contribute to its position in search engine results, directly affecting the number of people who see your work. For details of what you can do to influence this, visit How to help readers find your article online.

Title

Your manuscript's title should be concise, descriptive, unambiguous, accurate, and reflect the precise contents of the manuscript. A descriptive title that includes the topic of the manuscript makes an article more findable in the major indexing services.

Abstract

Please include a structured abstract of 250 words between the title and main body of your manuscript for original articles and Ideas and Innovations articles. The structured abstract should include the following headings and information, as applicable.

Structured Abstract:

Objective: State the main question or objective of the study and the major hypothesis tested, if any.

Design: Describe the design of the study indicating, as appropriate, use of randomization, anonymization, criterion standards for diagnostic tests, temporal direction (retrospective or prospective), etc.

Setting: Indicate the study setting, including the level of clinical care (for example, primary or tertiary; private practice or institutional).

Patients, Participants: State selection procedures, entry criteria, and numbers of participants entering and finishing the study.

Interventions: Describe the essential features of any intervention, including the methods and duration of administration.

Main Outcome Measure(s): The primary study outcome measures should be indicated as planned before data collection began. If the hypothesis being reported was formulated during or after data collection, this fact should be clearly stated.

Results: Describe measurements that are not evident from the nature of the main results and indicate any anonymization. If possible, the results should be accompanied by confidence intervals (most often the 95% interval) and the exact level of statistical significance. For comparative studies, confidence intervals should relate to the differences between groups. Absolute values should be indicated when risk changes or effect sizes are given.

Conclusions: State only those conclusions of the study that are directly supported by data, along with their clinical application (avoiding overgeneralization) and/or whether additional study is required before the information should be used in clinical settings. Equal emphasis must be given to positive and negative findings of equal scientific merit."

Data-based Brief Communications articles should include a structured abstract of no longer than 150 words with the following headings: Objective, Design, Setting, Patients/Participants, Interventions, Main Outcome Measure(s), Results, Conclusions.

Non-data-based Brief Communications, Perspective articles, and Ethics/Health Policy reports should include an unstructured abstract of no longer than 100 words.

Case/Clinical reports should include an unstructured abstract of no longer than 100 words, describing the objective, essential features and uniqueness of the case being presented, and conclusions.

What I (We) Do articles should include a 50–75-word structured abstract with the following format: background (what is the issue/problem), solution, what I/we did that is new.

Narrative reviews should include an unstructured abstract of no longer than 250 words.

Letters to the Editor and Editorials do not require abstracts.

Then this should follow: “If your research includes clinical trials, the trial registry name and URL, and registration number must be included at the end of the abstract. Submissions that do not meet this requirement will not be considered. For clinical trials, the trial registry name and URL, and registration number must be included at the end of the abstract. If your research includes clinical trials, the trial registry name and URL, and registration number must be included at the end of the abstract. Submissions that do not meet this requirement will not be considered.

For clinical trials, the trial registry name and URL, and registration number must be included at the end of the abstract.

This journal includes video abstracts. For more information on how to prepare a plain language summary, please see this page.

Keywords

Please include a minimum of 3 keywords, listed after the abstract. Keywords should be as specific as possible to the research topic.

Artwork, figures, and other graphics

For guidance on the preparation of illustrations, pictures, and graphs in electronic format, please read Sage’s artwork guidelines.

A list of figure legends must be included on a separate page at the end of the manuscript article file. The legend should explain each figure as concisely as possible. Do not include figure legends in your figure art file. Figure legends are not included in the word count limit.

Figures should be minimally processed and should reflect the integrity of the original data in the image. Adjustments to images in brightness, contrast, or color balance should be applied equally to the entire image, provided they do not distort any data in the figure, including the background. Selective adjustments and touch-up tools used on portions of a figure are not appropriate. Images should not be layered or combined into a single image unless it is stated that the figure is a product of time-averaged data. All adjustments to image date should be clearly disclosed in the figure legend. Images may be additionally screened to confirm faithfulness to the original data. Authors should be able to supply raw image data upon request. Authors should also list tools and software used to collect image data and should document settings and manipulations in the Methods section.

Tables should be numbered consecutively using Arabic numerals. Each table should have an appropriate title and explanation at its head. Abbreviations used in a table must be explained in a footnote below the table. Submit tables as separate files, with one table per file, in either .doc (text) or .xls (spreadsheet) format.

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The Title Page should include:

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    - **All persons eligible for authorship must be included at the time of submission (please see the authorship section for more information)**.
- Contact information for the corresponding author: name, institutional address, phone, email
- Acknowledgments section
- Declaration of conflicting interest
- Funding statement
- Ethical approval and informed consent statements
- Data availability statement
- Any other identifying information related to the authors and/or their institutions, funders, approval committees, etc, that might compromise anonymity.

Acknowledgments

If you are including an Acknowledgements section, this will be published at the end of your article. The Acknowledgments section should include all

contributors who do not meet the criteria for authorship. Per ICMJE recommendations, it is best practice to obtain consent from non-author contributors who you are acknowledging in your manuscript.

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Statements and declarations

To ensure proper anonymization, please include a section with the heading 'Statements and Declarations' on your title page, after the Acknowledgements section [and Author Contributions section if applicable] including each of the sub-headings listed below. If a declaration is not applicable to your submission, you must still include the heading and state 'Not applicable' underneath. Please note that you may be asked to justify why a declaration was not applicable to your submission by the Editorial Office. This information will be added to the end of your published paper.

Ethical considerations

Please include your ethics approval statements under this heading, even if you have already included ethics approval information in your methods section. If ethical approval was not required, you need to explicitly state this. You can find information on what to say in your ethical statements as well as example statements on our Publication ethics and research integrity policies page.

All papers reporting studies involving human participants, human data or human tissue must state that the relevant Ethics Committee or Institutional Review Board approved the study, or waived the requirement for approval, providing the full name and institution of the review committee in addition to the approval number. If applicable, please also include this information in the Methods section of your manuscript.

Consent to participate

Please include any participant consent information under this heading and state whether informed consent to participate was written or verbal. If the requirement for informed consent to participate has been waived by the relevant Ethics Committee or Institutional Review Board (i.e. where it has been deemed that consent would be impossible or impracticable to obtain), please state this. If this is not applicable to your manuscript, please state 'Not applicable' in this section. More information and example statements can be found on our Publication ethics and research integrity policies page.

Consent for publication

Submissions containing any data from an individual person (including individual details, images or videos) must include a statement confirming that informed consent for publication was provided by the participant(s) or a legally authorized representative. Non-essential identifying details should be omitted. Please do not submit the participant's actual written informed consent with your article, as this in itself breaches the patient's confidentiality. The Journal requests that you confirm to us, in writing, that you have obtained written informed consent to publish but the written consent itself should be held by the authors/investigators themselves, for example in a patient's hospital record. The confirmatory letter may be uploaded with your submission as a separate file in addition to the statement confirming that consent to publish was obtained within the manuscript text. If this is not applicable to your manuscript, please state 'Not applicable' in this section.

Declaration of conflicting interest

The journal requires a declaration of conflicting interests from all authors so that a statement can be included in your article. For guidance on conflict of interest statements, see our policy on conflicting interest declarations and the ICMJE recommendations.

If no conflict exists, your statement should read: 'The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article'.

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All articles need to include a funding statement, under a separate heading, **even if you did not receive funding**. You'll find guidance and examples on our Funding page.

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- Share your research data in a relevant public data repository
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- Cite this data in your research

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English language editing services

Authors seeking assistance with English language editing, translation, or figure and manuscript formatting to fit the journal's specifications should consider using Sage Author Services. Visit Sage Author Services for further information.

Appendix H – SIP Lay abstract

Having a baby with a cleft lip and/or palate (CL/P) can be challenging emotionally for parents, especially around the time of their child's first surgery to repair the cleft. This study looked at parent's experience of this time and what emotional support they had or needed. The researchers reviewed medical records of babies who had surgery in a specialist cleft service in 2023 to see what support they had received from psychology. Ten families whose children had their first surgery in 2023 were interviewed to learn about their experiences. From these interviews three main themes were identified. They were accessing support at Spires (how parents accessed support from the team), coping and emotional support needs (how parents coped during the time) and emotional support needs. The information from the interviews helped researchers make recommendations to improve psychological support offered to families in the service. The next step will be to put these recommendations in to action and see how they work.

Appendix I – SIP Recruitment Protocol

Recruitment protocol

Step 1

Identify potential participants from 2023 primary surgery repair list provided by Spires Cleft Centre.

Step 2

Speech and Language Assistant or Assistant Psychologist to make contact with potential participants. Using following script:

SCRIPT FOR RECRUITMENT

Hello, (Parent Name), this is (Name) calling from Spires Cleft Centre.

I'm calling because we're conducting a study about how parents prepare for their child's first repair surgery. We know this is an important time for families, and we're looking to learn more about your experiences and perspectives to improve support for other parents in the future.

We'd love to invite you to participate in this study. It involves meeting with a researcher, Nicola, for 30 minutes to an hour over TEAMS or by phone. She will ask you some questions about your experience during this time, particularly your emotional wellbeing and how the team supported you with this. We hope that hearing from parents like yourself will give us a better

understanding of family's experience of the psychological support they received from the team around their child's first surgery and help us learn how to better support families in the future.

Participation is completely voluntary and confidential, and we can work around when would best suit you. Do you have any questions about the study or how it works?

> *(Most information should be covered in the information sheet, if you don't know an answer you could let me know and I can email the parents or give them a call to clarify)*

If you're interested, I can set up a time that works for you. Or if you would like some time to think about it, would it be ok if I passed your details on to Nicola, the researcher and she can contact you with some further information about it?

> *If happy to participate – go to calendar and look for OPEN SLOT FOR RESEARCH slots in calendar and offer different times to parent.*
>
> *If would like more information, ask for email address and let them know that I will send on an email with further details shortly. Send me an email with email address and I will contact them directly.*

Thank you so much for taking my call today. Take care.

If parents ask for a follow up call use the following script:

SCRIPT FOR FOLLOW UP CALLS

Hello, (Parent's Name), this is (Name) from Spires Cleft Centre. Do you have a few minutes to talk briefly?

I'm following regarding our study on prepare preparedness for their child's first cleft lip and palate repair surgery. You might have spoken to Anna about it before/received an email from Nicola about it?

I wanted to check if you've had a chance to think about participating or if you might have any questions about the study.

Your input would be so valuable, and it would take about 30 minutes to an hour of your time. But participation is entirely voluntary and confidential. We'd be happy to work around your schedule to make it as convenient as possible for you.

If you're interested, I'd be happy to schedule a time for you to speak to Nicola now or I can ask her to contact you directly to set a time up?

Thank you so much for taking my call today. If you're not ready to decide now, that's perfectly fine. Please don't hesitate to reach out to Nicola if you have any questions later. Take care.

Step 3a

If participants agree to scheduling an appointment there and then access research calendar and find appropriate slot to suit participant.

Email researcher with participant contact details so they can send confirmation email, with information sheet and consent form attached:

TEMPLATE CONFIRMATION EMAIL (APPOINTMENT MADE BY AP/SALT Assistant)

Hi (parent's name),

I hope this message finds you well. I believe you were speaking to (name) at the Spires Cleft Centre during the week about the research I am currently completing with the service exploring parental experiences of their child's first cleft lip and palate surgery. I wanted to introduce myself and extend my thanks for agreeing to meet with me for an interview as part of this project. I am a Trainee Clinical Psychologist at the University of Oxford and have been working with Spires over the last couple of years to develop this project.

Our interview is scheduled for (time and date) and usually I meet with people for between 40 mins and 1 hour. I have sent you a Microsoft Teams invitation. However, if you would prefer a phone call instead, please let me know, and I will be happy to accommodate that.

For your reference, I have attached additional information about the research project and consent to this email. If you have any questions or would like any further details, please do not hesitate to reach out.

Thank you again for your time and support. I look forward to speaking with you.

Warm regards,

Nicola

Step 3b

If participants wish to be contacted by researcher. Send contact details to researchers email address.

Email sent by researcher (trainee clinical psychologist) to parents who consented to contact:

TEMPLATE EMAIL (CONSENT TO CONTACT)

Dear

I hope this email finds you well.

I believe you were contacted by my colleague (name) where you expressed interest in participating in our research project focused on the psychological preparedness and support for parents whose children are undergoing their first repair surgery at Spires. We really appreciate your willingness to contribute to this study.

As a next step, we would like to invite you to participate in an interview that will be conducted via Microsoft Teams or via telephone. The interview will

take somewhere between 30 minutes to one hour and will focus on your experiences, thoughts, and feelings about the psychological support you had surrounding your child's first repair surgery. The interview will need to be recorded to help the researchers compile the information you share following the interview. Your insights will be invaluable in helping us understand how to better support families in the future.

If you are still interested in participating, please let me know your availability over the next couple of weeks so we can work on finding a suitable time for the interview.

Please let me know if you have any questions, or if you want any further information. Thank you once again for your time and consideration. I look forward to hearing back from you.

Kind regards,

Nicola

Following confirmation of a date/time researcher to email confirmation to participant, with information sheet and consent form attached:

TEMPLATE CONFIRMATION EMAIL (APPOINTMENT MADE BY RESEARCHER)

Hi (parent's name),

Thank you for taking my call today about the research I am currently completing with the Spires Cleft Centre exploring parental experiences of their child's first cleft lip and palate surgery.

As discussed during our call our interview is scheduled for (time and date) and usually I meet with people for between 40 mins and 1 hour. I have sent you a Microsoft Teams invitation. However, if you would prefer a phone call instead, please let me know, and I will be happy to accommodate that.

For your reference, I have attached additional information about the research project and consent to this email. If you have any questions or would like any further details, please do not hesitate to reach out.

Thank you again for your time and support. I look forward to speaking with you.

Warm regards,

Nicola

Appendix J – SIP Consent form

Spires Cleft Centre & Russell Cairns Unit, West Wing Level 3, John Radcliffe Hospital Headley Way Oxford, OX3 9DU

Research Team
Trainee Clinical Psychologist: Nicola Roche
University Supervisor: Dr. Matthew Hotton
OUH Supervisor: Dr. Katie Hamilton

Contact
nicola.roche@psy.ox.ac.uk

WRITTEN CONSENT FORM

Parent's psychological preparedness for infant's primary cleft lip or palate surgery

Purpose of evaluation

For this service evaluation, we are interested in parent's experiences of their baby's primary cleft lip or palate surgery. The time around a baby's first repair surgery can be difficult for parents. The clinical psychologists within the Spires Cleft Centre can provide support to parents at these times. We are keen to hear from parents about their experiences of their baby's surgery and support available to them from the Spires Cleft Centre. We hope this will help us to understand what support is particularly helpful for

parents, and whether there are areas where we can continue to improve the psychological support for parents.

Please read through the statements below and initial the box on the right to give your consent to participate.

		Please initial each box
1	I confirm that I have read and understand the information sheet (*Version 1 dated 13/11/2023).* I heard again about the aims of the study and what it involves. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.	☐
2	I understand that my participation is voluntary and that I am free to withdraw at any time, without this effecting my child's care within the Spires Cleft Centre	☐

4	I understand who will have access to personal data provided, how the data will be stored and what will happen to the data at the end of the project.	☐
5	I understand how this research will be written up and published.	☐
6	I understand how to raise a concern or make a complaint.	☐
7	I agree to take part in the study	☐

Appendix K – SIP Information sheet

Oxford University Hospitals
NHS Foundation Trust

Spires Cleft Centre & Russell Cairns Unit,
West Wing Level 3, John Radcliffe
Hospital Headley Way Oxford, OX3 9DU

Research Team
Trainee Clinical Psychologist: Nicola Roche
University Supervisor: Dr. Matthew Hotton
OUH Supervisor: Dr. Katie Hamilton

Contact
nicola.roche@psy.ox.ac.uk

Parent's psychological preparedness for infant's primary cleft lip or palate surgery

PARTICIPANT INFORMATION SHEET

My name is Nicola Roche, and I am a Trainee Clinical Psychologist at the University of Oxford, working in the Spires Cleft Centre, under the supervision of Dr Katie Hamilton, Clinical Psychologist. This is an invitation to take part in service evaluation exploring parent's psychological preparedness for infant's primary cleft lip or palate surgery. Before you decide whether to take part, it is important that you understand why the research is being done and what it would involve. Please take time to read this information sheet, and to discuss it with others if you wish to. If there is anything that is not clear, or if you have questions and would like more information, please email me on nicola.roche@psy.ox.ac.uk.

1. Why is this service evaluation being conducted?

For this service evaluation, we are interested in parent's experiences of their baby's primary cleft lip or palate surgery. The time around a baby's first repair surgery can be difficult for parents. The clinical psychologists within the Spires Cleft Centre can provide support to parents at these times. We are keen to hear from parents about their experiences of their baby's surgery and support available to them from the Spires Cleft Centre. We hope this will help us to understand what support is particularly helpful for parents, and whether there are areas where we can continue to improve the psychological support for parents.

2. Why have I been invited to take part?

You have been asked to take part, as you are a parent or guardian whose child has recently undergone cleft surgery.

3. Do I have to take part?

No. You can ask questions about the evaluation before deciding whether you wish to take part.

If you do agree to take part, you may withdraw yourself from the study, without giving a reason, and without this impacting your child's care.

4. What will taking part involve?

We will carry out a telephone/MS Teams interview with you, which will take approximately 30 minutes and will be arranged for a time that is convenient for you. You will have a chance to ask any questions at the start of the interview. If you are still happy to take part, you will be asked to give verbal consent. You will then be asked a series of questions about your experience of psychological support within the Spires Cleft Centre before, during and after your child's initial repair surgery. You can ask to pause or stop the interview at any time.

5. Are there any potential risks in taking part?

At times, some of the questions may feel difficult to think about and it is possible that you might find answering some questions upsetting, as we ask you to think back to your child's surgery. You can take a break from the interview and return to it later or withdraw from the evaluation completely at any point. We can also signpost you to support from the Spires Cleft Centre clinical psychologists, if helpful.

6. Are there any benefits in taking part?

There will be no direct benefit to you from taking part in this evaluation. We hope that your participation will help us understand parents' experience of psychological support before, during and after their child's first repair surgery. We hope that this might then contribute to the development and

improvement of psychological support within the Spires Cleft Centre for families with similar experiences in the future.

7. What happens to the data provided?

We will adhere to the Oxford University Hospital data management policy. Data will be password-protected, and access will be restricted to the core project team (Nicola Roche, Katie Hamilton, Matthew Hotton). Responsible members of the University of Oxford may be given access to the data for monitoring and/or audit of the evaluation. All transcribed data will be anonymised; however, it is possible that you may disclose information in the survey which makes you potentially identifiable. All identifiable information will be removed in the write-up. Demographic information will be destroyed at the end of the study. All other survey data will be stored for at least three years after publication, in accordance with the University of Oxford's Policy on the Management of Research Data & Records.

We hope to use the findings to make recommendations for the spires psychology pathway so that they can improve parents' support. We may also publish the findings in an academic journal and present them at conferences with relevant healthcare professionals and charities. Any identifiable information will be removed before information is shared with other researchers or results are made public.

8. Will the service evaluation be published?

The evaluation will be written up as part of Nicola Roche's Doctorate in Clinical Psychology. On successful submission of the thesis, it will be deposited both online and in print in the University archives to facilitate its use in future research. The thesis will be openly accessible, and the evaluation is also likely to be written up for publication in a peer-reviewed scientific journal. No identifiable information will be included.

9. Who has reviewed this project?

This study has been reviewed by a subcommittee of the University of Oxford Doctor of Clinical Psychology Research Team and the OUH Psychological Medicine Clinical Governance Committee.

10. Who do I contact if I have a concern about the study or wish to complaint?

If you have a concern about any aspect of this study, please speak to Nicola Roche (nicola.roche@psy.ox.ac.uk) or their supervisor Katie Hamilton, 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 Mr Marc Swan, Clinical Director of the Spires Cleft Centre (Marc.Swan@ouh.nhs.uk).

12. Further Information and Contact Details

If you would like to discuss the service evaluation with someone beforehand (or if you have questions afterwards), please contact:

Nicola Roche

Trainee Clinical Psychologist

nicola.roche@psy.ox.ac.uk

Oxford Institute of Clinical Psychology Training and Research Isis Education Centre

Warneford Hospital

Oxford, OX3 7JX

Oxford University telephone number: +44 (0)1865 226431

You can also speak to the supervisor of the project about any questions or concerns using the details below:

Dr. Katie Hamilton

katie.hamilton@ouh.nhs.uk

Spires Cleft Centre & Russell Cairns Unit

West Wing Level 3,

John Radcliffe Hospital

Headley Way

Oxford OX3 9DU

+ 44 1865 234714/234264

I am interested in taking part!

What do I do now?

If you would like to participate, please email Nicola Roche to set up a telephone/TEAMS interview: nicola.roche@psy.ox.ac.uk

Thank you for taking the time to read this information sheet and for your interest in the study.

Appendix L – SIP Interview Schedule

Service Improvement Project Semi-Structured Interview Schedule

[Trainee to check that consent forms have been returned prior to start of interview]

INTRODUCTION

Hello, my name is Nicola Roche. I am a Trainee Clinical Psychologist. Thank you for meeting with me today, I am really grateful.

As a reminder, the project that we are meeting for today aims to improve the psychological support available to families of babies who are undergoing their first cleft lip/palate surgery.

When you were first told about this project, you will have been sent information sheets and consent forms. Do you have any questions?

I understand that when a baby is undergoing their first cleft lip/palate surgery it can be upsetting for parents. Whilst is a psychology team within the service, families have differing experiences with the services and may not meet with a psychologist during this time. I am going to start off by

asking some questions about what it is was like before, during and after your baby's surgery and ask you some specific questions about your experience with the psychology team. We will then talk about any ideas you have about what you might have found helpful during this time.

In terms of what to expect from our discussion:

- I am not a clinician in the service the team at Spires Cleft Centre; I am a trainee clinical psychologist and am involved only in doing this project with the service.
- All information from our discussion that could identify you such as names will be removed when I write up this project, to make sure your answers remain private.
- I understand that talking about these experiences may be hard, so please let me know if there are any questions that you do not want to answer.
- You can also take a break or stop the interview at any time.
- It is also OK if you are not sure about a question/answer.
- I am interested what in what the psychology team are doing with families of children undergoing surgery at present and what parts are helpful or if families feel like they need more/different support. This information will hopefully help the Spires team to make changes to improve the support for other parents in the future.

Whilst I have some questions for you, this is also your opportunity to tell me anything else about having a child undergoing surgery that you think is important.

We will be talking for around 30 minutes to one hour.

Thank you. We are going to touch on some sensitive topics today if that feels OK with you. Before we start, I want to check in with how you are feeling today?

Before I begin asking the questions I have for you, do you have any questions you want to ask me?

[Answer any questions the participant may have]

Are you OK for me to now start recording and start asking some questions?

[Turn on recording]

<u>WARM UP AND BACKGROUND QUESTIONS</u>

We are now going to think a bit about your family.

- Who is in the family, number of children, your child's cleft type, positions in family of child who underwent surgery, other family supports (e.g. grandparents).
- Confirm when baby's surgery was and what age they were.
- Confirm when they received diagnosis

EXPERIENCES

Now I am going to ask a bit more about your experiences as a parent, your contact with the psychology team and what it was like having a child undergo surgery with the Spires Cleft Centre. We might spend some time thinking about the time just before/the run up to the surgery, then while you were in the hospital while your child was having surgery and the period after you returned home with your child.

- Did you have any input from a psychologist about your child's surgery?

If yes:

- At what stage of (baby)'s care was this?
- What was the nature of the input?
- Virtual/face to face?
- Who accessed support – parents/sibling/grandparents?
- What was helpful?
- Is there anything that could have been done differently?
- Did you feel you accessed psychological or emotional support from another member of the team (e.g. nurses)? To what extent were your psychological or emotional needs met by these members of the team?
- What was your experience of this?
- To what extent were your psychological or emotional needs met by others from outside the team (e.g. social support, private support, social care, another team)?
- What was your experience of this?

If no:

- Were you aware of the psychology team?
- Was there a reason you did not have access to the psychology team?
- Would it have been helpful for you to meet with a psychologist?

- If yes, why?
- If no, why?
- What would you have liked support with from psychology?
- Did you feel you accessed psychological or emotional support from another member of the team (e.g. nurses)? To what extent were your psychological or emotional needs met by these members of the team?
- What was your experience of this?
- To what extent were your psychological or emotional needs met by others from outside the team (e.g. social support, private support, social care, another team)?
- What was your experience of this?

Aside from what we have spoken about, is there any other psychological support that would have been helpful around the time of (baby)'s first surgery?

Prompts: *[explore a range of different support such as]* review sessions with a psychologist, psychological input from other members of the team, private/individual support from parents, resources, information booklet, group support.

Before

- How did you feel in the run up to (baby's) surgery?

- Did you feel supported emotionally when receiving information about your baby's surgery?

- Is there anything you wish you had been told about (baby)'s surgery, that would have helped your wellbeing?

Prompts: *[Options to explore]* About the options relating to surgery?

Emotions that might accompany it (e.g. changes to (baby)'s appearance.

- Is there anything that could have helped you or your family, thinking about your emotional wellbeing, to cope better before (baby)'s surgery?

Prompts: *[prompt with emotions such as worry and sadness – and what*

these emotions were in relation to (e.g. consenting to surgery)]

During admission for surgery

- Were you appropriately prepared for any impact of time spent in hospital during surgery on you and your family? Were there any aspects which particularly impacted on/supported you/your family's wellbeing?
- Did you feel suitably supported or prepared by the team for being reunited with your child after the surgery?
- Is there anything that could have helped you or your family, regarding your emotional wellbeing, to better prepare you to cope better during (baby)'s hospital stay?

Prompts: Work/School life? Routines? Role/responsibilities? Anything else?

Following surgery

- How did it go when you brought (baby) home after their surgery, did you feel prepared for this?

- Were there any changes that impacted you as a family following (baby)'s surgery?
- Is there anything that could have helped you or your family's emotional wellbeing, to cope better when (baby) went back home?

GENERAL

What in particular helped you to cope emotionally?

- Is there anything/anyone else that helped you or your family cope around the time of (baby)'s surgery?

Prompts: *[this may include self-care, personal/family strengths, personal/family beliefs, social support, particular support/social media/cleft community]*

- What might it have been helpful for other people to have known or done?

Prompts: *[explore]* Perhaps about how you were feeling or your experiences? Can explore in terms of parents, staff, teachers, friends, extended family and other people in life or community.

With their psychological wellbeing in mind, is there anything that you would want to tell another family who has child undergoing surgery with the Spire's team?

ENDING

Before we end, is there anything that we have not talked about your experience of psychological support at the time of (baby)'s surgery that you would like to share with me, or think is important?

Were you expecting we would talk about anything that we have not?

Thank you very much for taking the time to talk to me today. We really appreciate you talking about your experiences so openly and you have been a great help to our project.

[Turn off recording]

[Provide participant debrief sheet. Allow time for any questions about the project]

DEBRIEF

- We have touched on some sensitive topics today – I wanted to check in with how you are feeling?
- Any questions?

Thank you again for taking part.

Note: (baby) refers to name of patient.

Appendix M – SIP Author Positionality

I am a White Irish female, in my thirties, who moved to England three years ago to begin training on the DClinPsy. I do not have children of my own. I have not previously worked in paediatric settings and had no prior relationship with any the participants involved in this study. I have previously worked in psychology services where children and families who have had physical health conditions, or have had an experience of surgery during infanthood, attended for psychological support. I have no personal experience of cleft, although my brother did have to have surgery as a child for a physical health condition when I was in my early teens and I can remember the impact this had on my family.

I am currently completing my doctoral training in Clinical Psychology. I have also completed a Batchelors Degree in Psychology in Ireland and a Master's in Clinical Psychology in the Netherlands. The research I have completed to date has been quantitative and so this is my first time using Thematic Analysis. I would position myself as having a pluralist epistemological stance. My experiences both academically and clinically internationally have made me passionate about the importance of accessible and functioning healthcare for children and their families. I have worked in services and systems that, through a myriad of reasons, have been very difficult to access. I have also worked in services that are well resourced and have seen the benefits this has had on those who come to us for support. I have been very interested, throughout my career in how we, as

professionals, can address the barriers that people are facing when accessing help, rather than considering them as not engaging.

Throughout this process, to address any potential bias, I used the note function of NVivo to record my thoughts as familiarised myself with the data and went through the coding and recoding processes. In these notes I thought about my perceptions of the information in front of me and any alternative interpretations I had. During each step of the process I sat down with these notes and did some reflective journaling. This allowed me space to think about any blind spots I might have had or how my own experiences or personal views impacted on my analysis of the data in this project.

Appendix N – Instructions to Author for TDRP

All articles must include the following sections:

1. **Key Learning Aims** (3 – 5 bullet points)
   - Position – After the Abstract and Keywords
   - Intention – What will the reader learn through reading the paper?
2. **Key Practice Points** (3 – 5 bullet points)
   - Position – before the references
   - Intention – a summary of the papers with clear and practical implications for the day-to-day practice of CBT therapists
3. **Further Reading**
   - Position – before the references and after the Key Practice Points
   - Intention – to direct the reader to other relevant follow up literature

This stipulation is in keeping with the practitioner and professional development aims of the journal.

The main types of articles published are detailed below as a guide. Many of these will be therapy related but tCBT also welcomes papers related to subject areas such as CBT supervision and training.

Most papers will have a subject area (e.g. therapy, assessment, supervision, training, service development) and a paper type (e.g. Original Research, Case Study, Review) e.g. a single case study looking at the impact of supervision, an empirically grounded clinical guidance paper focussing on a training method.

Research Transparency

The Cognitive Behaviour Therapist believes in the importance of transparent and reproducible research. We therefore strongly encourage authors to make their evidence, data and other materials that underpin their findings

openly available to readers which is outlined in our Research Transparency Policy(opens in a new tab). Authors will be asked on submission to include in their cover letter to the Editor whether they have made their data publicly available and confirm the inclusion of the Data Availability Statement. If the authors are not making their data publicly available, we ask them to state the reason why in their cover letter.

Types of Paper

Original Research*

Research evidence is at the heart of the practice of cognitive and behavioural psychotherapists. Original research will be published that directly relevant to the practice of CBT, such as the therapeutic relationship, therapeutic process and the evaluation of therapeutic strategies and techniques. It is expected that such reports meet both the necessary standards of scientific rigour and the journal's requirement of clear implications for the practice of CBT. Consequently, the description of the research and the presentation of results should be sufficiently brief to enable sufficient discussion of the practice implications. Consideration will be given to quantitative, qualitative and mixed approaches given appropriate fit between the question, methodology and research methods chosen.

For examples see:

Hutton, J., Ellett, L., & Berry, K. (2017). Adult attachment and paranoia: An experimental investigation. *The Cognitive Behaviour Therapist, 10*, E4. doi:10.1017/S1754470X17000058

Kobori, O., Salkovskis, P., Pagdin, R., Read, J., & Halldorsson, B. (2017). Carer's perception of and reaction to reassurance seeking in obsessive compulsive disorder. *The Cognitive Behaviour Therapist, 10*, E7. doi:10.1017/S1754470X17000095

McManus, F., Leung, C., Muse, K., & Williams, J. (2014). Understanding 'cyberchondria': An interpretive phenomenological analysis of the purpose, methods and impact of seeking health information online for those with health anxiety. *The Cognitive Behaviour Therapist, 7*, E21. doi:10.1017/S1754470X14000270

This category of paper type could also include single-case experimental design research or a case series.

For example see:

Thomson, C., Wilson, R., Collerton, D., Freeston, M., & Dudley, R. (2017). Cognitive behavioural therapy for visual hallucinations: An investigation using a single-case experimental design. *The Cognitive Behaviour Therapist, 10*, E10. doi:10.1017/S1754470X17000174

Empirically Grounded Clinical Guidance Papers*

Some of the most widely-read and discussed papers in tCBT have been those that are the synthesis of clinical experience, using informed reasoning to link limited direct evidence in the field with evidence from wider fields.

tCBT is very keen to consider submission of such papers in relevant fields that are of interest to CBT therapists, supervisors and trainers. These tend

to be written by experts in the field and are designed to solve specific practical problems or clarify gaps in our knowledge. Ideally they lead to practical implications and recommendations whilst generating hypotheses for future research.

For examples see:

Barton, S., Armstrong, P., Wicks, L., Freeman, E., & Meyer, T. (2017). Treating complex depression with cognitive behavioural therapy. *the Cognitive Behaviour Therapist, 10*, E17.

Duffy, M., & Wild, J. (2017). A cognitive approach to persistent complex bereavement disorder (PCBD). *the Cognitive Behaviour Therapist, 10*, E16.

Freeston, M., Tiplady, A., Mawn, L., Bottesi, G., & Thwaites, S. (2020). Towards a model of uncertainty distress in the context of Coronavirus (COVID-19). *The Cognitive Behaviour Therapist, 13*, E31. doi:10.1017/S1754470X2000029X

Freeston, M., Thwaites, R., & Bennett-Levy, J. (2019). 'Courses for Horses': Designing, adapting and implementing self-practice/self-reflection programmes. *The Cognitive Behaviour Therapist, 12*, E28.

Menzies, R., & Menzies, R. (2020). Death anxiety in the time of COVID-19: Theoretical explanations and clinical implications. *The Cognitive Behaviour Therapist, 13*, E19. doi:10.1017/S1754470X20000215

Murray, H., Merritt, C., & Grey, N. (2015). Returning to the scene of the trauma in PTSD treatment - why, how and when? *the Cognitive Behaviour Therapist, 8*, 1–12.

Murray, H., Pethania, Y., & Medin, E. (2021). Survivor guilt: A cognitive approach. *The Cognitive Behaviour Therapist, 14*, E28. doi:10.1017/S1754470X21000246

Warnock-Parkes, E., Wild, J., Thew, G., Kerr, A., Grey, N., Stott, R., . . . Clark, D. (2020). Treating social anxiety disorder remotely with cognitive therapy. *The Cognitive Behaviour Therapist, 13*, E30. doi:10.1017/S1754470X2000032X

Young, K., Chessell, Z., Chisholm, A., Brady, F., Akbar, S., Vann, M., . . . Dixon, L. (2021). A cognitive behavioural therapy (CBT) approach for working with strong feelings of guilt after traumatic events. *The Cognitive Behaviour Therapist, 14*, E26. doi:10.1017/S1754470X21000192

Case Studies*

Dissemination of effective practice will be promoted through the publication of case studies that involve CBT with individuals, couples, groups and families. A suggested template is provided which is designed to ensure sufficient information is provided to allow other therapists to replicate successful therapy. All articles must include 3-5 learning objectives that will be achieved through reading the article. At the end of each paper a summary of the main practice points should be included with suggestions for

follow-up reading. This stipulation is in keeping with the practitioner and professional development aims of the journal.

The case study should contribute to the development of theory or clinical practice, and feed into CBT practice as a whole rather than just relating to the specific case. Case studies should generally follow this structure:

- Abstract
- Key Learning Points
- Introduction: including an outline of theoretical research and clinical literature relevant to the case
- Presenting problem: including information on the presenting problem and associated goals of treatment, diagnosis, relevant history and development of problems, scores on standard and idiographic measures, relevant history
- Formulation: including a relevant theory-based CBT model used as a framework.
- Course of therapy: including methods used linked to theory and assessment of progress; difficulties encountered and any innovations in therapy
- Outcome: including clinical change, progress towards goals, change to measures, plans for follow-up
- Discussion: including relating to theory and evidence-base as well as reflections on own practice; implications for therapy and recommendations for other clinicians
- Key Practice Points
- Further Reading

For examples see:

Bernstein, R., Angell, K., & Dehle, C. (2013). A brief course of cognitive behavioural therapy for the treatment of misophonia: A case example. *The Cognitive Behaviour Therapist, 6*, E10. doi:10.1017/S1754470X13000172

Jenkins, P. (2017). Can temporary cessation of CBT really be therapeutic? A case study. *The Cognitive Behaviour Therapist, 10*, E8. doi:10.1017/S1754470X17000101

In addition to clinical case studies, there may be case studies related to training or supervision which would require a slightly amended structure to the one outline above.

Invited Papers*

At times tCBT will invite papers on specific issues where there is a gap in the clinical literature. This may involve commissioning papers directly from experts in a particular area or this may be a call to the wider CBT community.

Reviews*

Reviews of historical, contemporary, or innovative approaches to practice are also sought providing that they demonstrate relevance to the practice of the current cognitive and behavioural psychotherapies. Prospective authors for review papers should initially discuss their proposals with the Editor-in-Chief.

Reviews of Assessment Tools and Methods*

Reviews of clinical scales and other assessment methods will also be considered.

These reviews should provide the practitioner with a review of a scale's or other tool's purpose and properties, sufficient information to know how and when to use it, and how to interpret the results and make use of them. All articles must include a set of 3-5 learning objectives that will be achieved through reading the paper. At the end of each paper a summary of the main points from the paper must be included with suggestions for follow-up reading. This stipulation is in keeping with the practitioner and professional development aims of the journal.

For examples see:

Hyland, P., Shevlin, M., Adamson, G., & Boduszek, D. (2013). The factor structure and composite reliability of the Profile of Emotional Distress. *The Cognitive Behaviour Therapist, 6*, E15. doi:10.1017/S1754470X13000214

Reiser, R., Cliffe, T., & Milne, D. (2018). An improved competence rating scale for CBT Supervision: Short-SAGE. *The Cognitive Behaviour Therapist, 11*, E7. doi:10.1017/S1754470X18000065

Service Models, Forms of Delivery and Cultural Adaptations of CBT*

The service model is the clinical and operational framework that exists to support the therapist with the delivery of cognitive behavioural therapies. Description and evaluation of innovative clinical service models (both in the UK and internationally) and delivery formats that can be generalised to other services will be considered for publication. Audits will only be considered if they are of wider interest and value in informing the work of other services.

tCBT is keen to publish research that either expands the evidence base for previously under-represented groups or work that describes and evaluates cultural adaptations that are required for different populations.

For examples see:

Jankowska, M. (2019). Cultural modifications of cognitive behavioural treatment of social anxiety among culturally diverse clients: A systematic literature review. The Cognitive Behaviour Therapist, 12, E7. doi:10.1017/S1754470X18000211

King, D., & Said, G. (2019). Working with unaccompanied asylum-seeking young people: Cultural considerations and acceptability of a cognitive behavioural group approach. The Cognitive Behaviour Therapist, 12, E11. doi:10.1017/S1754470X18000260

Thew, G. (2020). IAPT and the internet: The current and future role of therapist-guided internet interventions within routine care settings. The Cognitive Behaviour Therapist, 13, E4. doi:10.1017/S1754470X20000033

Thew, G., MacCallam, J., Salkovskis, P., & Suntharalingam, J. (2017). Developing and evaluating psychological provision in the acute hospital setting for patients with chronic respiratory disease. The Cognitive Behaviour Therapist, 10, E5. doi:10.1017/S1754470X17000071

Education and Supervision*

The dissemination of effective cognitive and behaviour therapy through evidence based education and supervision strategies is important to ensure

that service users receive proficient therapy and therapists remain up to date. This section will explore educational models, evaluations of innovative education strategies and approaches to the supervision of practice within the cognitive and behavioural psychotherapies. All articles must include a set of 3-5 learning objectives that will be achieved through reading the paper. At the end of each paper a summary of the main points from the paper must be included with suggestions for follow-up reading. This stipulation is in keeping with the practitioner and professional development aims of the journal.

* These article types may be eligible for APC waivers or discounts under one of the agreements(opens in a new tab) Cambridge University Press has made to support open access.

Style Guide

Title page

This should uploaded as a separate file the main text to ensure blind review.

The title should phrase concisely the major issues. Author(s) to be given with departmental affiliations and addresses, grouped appropriately. A running head of no more than 40 characters should be indicated.

The following statements should be included on the title page:

Acknowledgements

You may acknowledge individuals or organizations that provided advice, support (non-financial).

Conflicts of Interest

Authors should include a Conflicts of Interest declaration in their title page. This statement will be published in the final article. Conflicts of Interest are situations that could be perceived to exert an undue influence on an author's presentation of their work. They may include, but are not limited to, financial, professional, contractual or personal relationships or situations. Conflicts of Interest do not necessarily mean that an author's work has been compromised. Authors should declare any real or perceived Conflicts of Interest in order to be transparent about the context of their work. If the manuscript has multiple authors, the author submitting the title page must include Conflicts of Interest declarations relevant to all contributing authors. For further information about Conflicts of Interest please see: https://www.icmje.org/recommendations/browse/roles-and-responsibilities/author-responsibilities--conflicts-of-interest.html(opens in a new tab).

Example wording for your Conflicts of Interest declaration is as follows: "Conflicts of Interest: Author A is employed at company B. Author C owns shares in company D, is on the Board of company E and is a member of organisation F. Author G has received grants from company H." If no Conflicts of Interest exist, your declaration should state "Conflicts of Interest: None".

If the study you are submitting focuses on a commercially available product (such as online CBT tools or APPS) or is funded by a commercial company, you should ensure that your Conflict of Interest statement covers the following:

- What the relationship is between the authors and the company. If authors had access to all study data and if they have entered into any agreement with the company that may limit their independence in analysis and interpretation of the data, preparation of the manuscript and choosing where to publish it.
- What the role of the sponsoring company has been in the following areas: design of the study; data collection, analysis and interpretation; writing the manuscript; approving the manuscript for publication and deciding where to publish.
- Authors should also state that they have not been encouraged or asked to repress, withhold, or modify any data, results, or conclusions by the sponsoring company.
- What influence the connection with the company could be perceived to have and how the authors have mitigated this.
- A statement may also be added by the Editorial Office to clarify what steps the Editors have taken to rule out any bias that may arise from any potential Conflict of Interest.
- Please note internal ethical approval by a commercial company would not be acceptable, it would need to be from an independent institution.
- Any authors with questions regarding this policy are welcome to contact the Editorial Office prior to submission to discuss further.

Data Availability Statement

This is a brief statement about whether the authors of an article have made the evidence supporting their findings available, and if so, where readers may access it. More information on Data Availability Statements and example statements can be found here(opens in a new tab). Please note that if you are not making your data publicly available, we ask you to state

the reason why in your cover letter to the Editor. Also see information on Data Availability below in these instructions.

Financial support

Please provide details of the sources of financial support for all authors, Including grant numbers. For example, "This work was supported by the Medical research Council (grant number XXXXXXX)". Multiple grant numbers should be separated by a comma and space, and where research was funded by more than one agency the different agencies should be separated by a semi-colon, with "and" before the final funder. Grants held by different authors should be identified as belonging to individual authors by the authors' initials. For example, "This work was supported by the Wellcome Trust (A.B., grant numbers XXXX, YYYY), (C.D., grant number ZZZZ); the Natural Environment Research Council (E.F., grant number FFFF); and the National Institutes of Health (A.B., grant number GGGG), (E.F., grant number HHHH)". Where no specific funding has been provided for research, please provide the following statement: "This research received no specific grant from any funding agency, commercial or not-for-profit sectors."

Main Text (anonymised with no author information)

This should be uploaded as a .doc file with the following running order (unless a Case study). The following format is based on APA style, which should be followed throughout: http://www.apastyle.org/(opens in a new tab)

Abstract

This should summarize the article in no more than 250 words, references should not be included in the abstract.

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Please include up to six key words that could be used to effectively search for the article.

Key Learning Aims

Body of paper

This should begin with an introduction, succinctly introducing the point of the paper to those interested in the general area of the journal. Attention should be paid to the Editorial Statement. The appropriate positions of tables and figures should be indicated in the text. Footnotes should be avoided where possible.

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Key Practice Points

Further Reading

References

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Grady, J. S., Her, M., Moreno, G., Perez, C., & Yelinek, J. (2019). Emotions in storybooks: A comparison of storybooks that represent ethnic and racial groups in the United States. *Psychology of Popular Media Culture, 8*(3), 207–217. https://doi.org/10.1037/ppm000...

Authors are encouraged to make use of referencing software packages (e.g. Endnote, Mendeley, Reference Manager etc.) to assist with formatting - extensions for APA formatting are easily accessible. Authors are also reminded to use bold face for author names in the reference list.

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Use text anchors to show their intended position within the manuscript.

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Where unpublished material e.g. behaviour rating scales or therapy manuals are referred to in an article, copies should be submitted as an additional document (where copyright allows) to facilitate review. Supplementary files can be used to convey supporting or extra information to your study, however, the main manuscript should be able to ‘stand-alone’. Supporting documents are reviewed but not copyedited on acceptance of the article. They can therefore be submitted in PDF format, and include figures and tables within the text. There is no word limit for supporting online information.

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The journal also encourages clarity in describing interventions sufficient to allow their replication through the use of the Template for Intervention Description and Replication Checklist(opens in a new tab) (TIDieR).

Randomised Controlled Trial	CONSORT	http://www.consort-statement.org/(opens in a new tab)
Systematic reviews and Meta-Analysis	PRISMA	http://www.prisma-statement.org/(opens in a new tab)
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tCBT reminds authors to use inclusive language (see these C4DISC guideines(opens in a new tab) for further information) which are in line with the BABCP values of opposing discrimination of any kind and continually working to improve our recognition of, and take an active stance against discrimination and inequality(opens in a new tab).

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We recognise that the use of artificial intelligence (AI) in research publications is increasing. However, we do not consider artificial intelligence

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We will permit the use of AI tools for spelling and grammar checking to improve the readability and language of a manuscript. This must be done with human oversight and authors should carefully review the output before submission. Any use of generative AI tools must be disclosed by the authors in the Acknowledgements section in the title page of their manuscript. This should include the tool used and its version, the date it was used and reason for its use along with a declaration that the author(s) are entirely responsible for the scientific content of the paper and that the paper adheres to the journal's authorship policy. Failure to acknowledge assistance from technical writers, language editors, AI tools and/or writing agencies in drafting manuscripts for publication in the Acknowledgements section may lead to disqualification of the paper.

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Competing Interests

All authors must include a competing interest declaration in their title page. This declaration will be subject to editorial review and may be published in the article.

Competing interests are situations that could be perceived to exert an undue influence on the content or publication of an author's work. They may include, but are not limited to, financial, professional, contractual or personal relationships or situations.

If the manuscript has multiple authors, the author submitting must include competing interest declarations relevant to all contributing authors.

Example wording for a declaration is as follows: "Competing interests: Author 1 is employed at organisation A, Author 2 is on the Board of company B and is a member of organisation C. Author 3 has received grants from company D." If no competing interests exist, the declaration should state "Competing interests: The author(s) declare none".

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When authors submit manuscripts to this journal, these manuscripts should not be under consideration, accepted for publication or in press within a different journal, book or similar entity, unless explicit permission or agreement has been sought from all entities involved. However, deposition of a preprint on the author's personal website, in an institutional repository, or in a preprint archive shall not be viewed as prior or duplicate publication. Authors should follow the Cambridge University Press Preprint Policy regarding preprint archives and maintaining the version of record.

Appendix O – TDRP Participant Information Sheet

Oxford Institute for Clinical Psychology Training and Research Isis Education Centre, Warneford Hospital Oxford, OX3 7JX

Research Team
Trainee Clinical Psychologist: Nicola Roche
Principal Investigator: Professor Paul Salkovskis

UNIVERSITY OF OXFORD

AN EXPERIMENTAL INVESTIGATION OF CLINICIANS 'JUDGEMENT OF ANXIETY DISORDERS

PARTICIPANT INFORMATION SHEET

Central University Research Ethics Committee (CUREC)

Approval Reference: R93179/RE001

My name is Nicola Roche, and I am a Trainee Clinical Psychologist at the University of Oxford, working alongside Professor Paul Salkovskis. This is an invitation to take part in our research study exploring clinicians' perspectives on anxiety. Before you decide whether to take part, it is important that you understand why the research is being done and what it would involve. Please take time to read this information sheet, and to discuss it with others if you wish to. If there is anything that is not clear, or if you have questions and would like more information, please email me on nicola.roche@psy.ox.ac.uk.

1. Why is this research being conducted?

For this study, we are principally interested in clinicians' perspectives of anxiety disorder treatment. Anxiety disorders are a common mental health condition, where people worry a lot.

2. Why have I been invited to take part?

You have kindly shown interest in helping us with this research study. We are happy to hear from anyone who has heard about the study and is interested in finding out more information about participating. In some instances, you may have been asked to participate, as you are a clinician working with people who are experiencing anxiety.

3. 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. As all collected data is anonymised we will be unable to withdraw your data once you have submitted your responses.

4. What will happen to me if I take part in the research?

The study will involve completion of a demographics questionnaire, and a short task which includes: reading through some background information about a referral for CBT, watching a short vignette video of the referred person describing their problems, and answering some questions about therapy for this person through an online form.

Initially, you will be asked to provide your consent to take part in the study. The questionnaires will include questions about your views of the presenting case and your opinions of the outcome of treatment. Participation in the study will take 20 - 30 minutes.

5. Are there any potential risks in taking part?

We do not think there are any potential risks in participating in this study.

6. Are there any benefits in taking part?

There will be no direct benefit to you from taking part in this research. We hope that your participation will help us understand clinicians' perspectives

on anxiety treatments, whichmight then contribute to the development and improvement of psychological support for people affected by anxiety.

7. What happens to the data provided?

We will not collect any data that will directly identify you.

We will store consent records securely on University of Oxford servers for 3 years after publication or public release of the research results. This information will then be permanently deleted and destroyed.

Research data obtained from questionnaires will be stored securely by the University of Oxford for 3 years after publication or public release of the research results. This information will then be permanently deleted and destroyed from University storage. Following data analysis and publication by our research team, and in line with good practice for Open Science that permits other scientists to replicate our findings, we plan to deposit anonymised data online in the Open Science Framework (OSF) depository.

The research team involved in this study will have access to the research data. Using the research data, we hope to report our findings in academic journals, and to other health professionals at conferences. You will not be identified or identifiable in any reports or publications arising from the study.

8. Will the research be published?

The University of Oxford is committed to the dissemination of its research for the benefit of society and the economy and, in support of this commitment, has established an online archive of research materials. This archive includes digital copies of student theses successfully submitted as part of a University of Oxford postgraduate degree programme. Holding the archive online gives researchers easy access to the full text of freely available theses, thereby increasing the likely impact and use of that research.

The research will be written up as part of Nicola Roche's Doctorate in Clinical Psychology. On successful submission of the thesis, it will be deposited online in the University archives to facilitate its use in future research. The thesis will be openly accessible, and the research is also likely to be written up for publication in a peer-reviewed scientific journal.

The research team also aims to disseminate findings to UK charities involved in supporting people with anxiety.

9. Who has reviewed this study?

This study has been reviewed by, and received ethics clearance through, a subcommittee of the University of Oxford Central University Research Ethics Committee

10. Who do I contact if I have a concern about the study or wish to complain?

If you have a concern about any aspect of this study, please speak to Nicola Roche (nicola.roche@psy.ox.ac.uk) or their supervisor Paul Salkovskis, 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 University of Oxford Research Governance, Ethics & Assurance (RGEA) team at rgea.complaints@admin.ox.ac.uk or on 01865 616480.

11.Data Protection

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 study. The University will process your personal data for the purpose of the research outlined above. Research is a task that is performed 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

12.Further Information and Contact Details

If you would like to discuss the research with someone beforehand (or if you have questions afterwards), please contact:

Nicola Roche

Trainee Clinical Psychologist

nicola.roche@psy.ox.ac.uk

Oxford Institute of Clinical Psychology Training and Research Isis Education Centre

Warneford Hospital

Oxford, OX3 7JX

Oxford University telephone number: +44 (0)1865 226431

You can also speak to the supervisor of the project about any questions or concerns using the details below:

Professor Paul Salkovskis (University of Oxford)

Consultant Clinical Psychologist

Paul.salkovskis@hmc.ox.ac.uk

Oxford Institute of Clinical Psychology Training and Research Isis Education Centre

Warneford Hospital

Oxford, OX3 7JX

Oxford University telephone number: +44 (0)1865 226431

I am interested in taking part!

what do I do now?

If you would like to participate, please click on this link https://psychiatryoxford.qualtrics.com/jfe/form/SV_8Jp0HBmbSXP2JRs or scan the QR code below or email Nicola Roche with any further questions: nicola.roche@psy.ox.ac.uk

Thank you for taking the time to read this information sheet and for your interest in the study.

Appendix P – TDRP Referral Information

Referral information

Condition 1

Subject: Referral for Cognitive Behavioural Therapy (CBT) - Alex

To Whom It May Concern,

I am writing to refer Alex, age 27, a patient under my care, for Cognitive Behavioural Therapy (CBT) due to significant and worsening symptoms of anxiety, which have been affecting her daily life. Alex has been experiencing escalating anxiety over the past 7-8 months. Her recent return to university has been accompanied by challenges, notably academic struggles. She has reported restlessness, irritability, fatigue, concentration difficulties, and disrupted sleep patterns, all of which have adversely impacted her academic performance and made it more difficult for Alex to access support and develop social support in university. In our consultations, Alex has highlighted particular difficulties with returning to a learning environment. Despite a strong interest in her course Alex is struggling with adjusting to the demands of her course.

As her GP, I believe CBT would be beneficial in assisting Alex to address her anxiety symptoms effectively. I recommend early intervention and support in managing her anxiety-related challenges. Your prompt attention to this referral would be greatly appreciated. Please feel free to contact me if further information is required.

Yours faithfully,

GP

Addition information Condition 2

Alex says that she struggles to know how to fit in and tries hard to say and do the ‘right’ things with her peers which has impacted on her accessing social support in university. She has highlighted some sensory sensitivities, particularly to noise. She is also finding it challenging maintaining focus and concentration, as well as difficulties with time management. All of which have notably intensified her anxiety symptoms and have contributed to her academic challenges.

Additional information Condition 3

I did wonder, given the difficulties she has described, if Alex has displayed traits indicative of potential autism, which has previously been suggested to her in academic settings.

Appendix Q – TDRP Transcript of Video Vignette

Carys: Hi Alex, my name is Carys, and I understand that you're here today because you've been experiencing some feelings of anxiety. Can you tell me a little bit

more about that?

Alex: Um yeah, so I just get really anxious at the moment. Um, I'm doing a really hard course and it's just been really hard, and yeah just finding it hard to manage now.

Carys: Ok, in what way would you say it's been hard?

Alex: Um well, it's, I feel like I'm just doing it really badly, like I used to be good at school. Like I always used to get, like A's and stuff, um and I knew how to do it but since I've started this Master's it's, it's just so hard. I failed an exam, like there's too many assignments and I still have to do like all the house stuff, and it's just, I'm just not doing any of it when I need to do loads, and I think I'm just overwhelmed with everything.

Carys: Sounds like, it sounds like a lot of things are coming up and that things are really difficult right now.

Alex: Mhmm, yeah.

Carys: I'm wondering how long has it been this way?

Alex: Um, like I think like 7 months it's been like, bad like this.

Carys: Ok, and has anything changed? Did anything change prior to those seven months for things to then tip.

Alex: I guess I started this Masters so

Carys: Ok.

Alex: Um yeah, it's just hard to adapt to it I think but that's, that's the main thing I

guess that's, that's different.

Carys: That makes a lot of sense I think all change can be difficult to, to deal with sometimes and it, it just sounds that the past seven months have been difficult, in trying to manage all the stressors that come with starting a new

course and adapting to the changes and the workload, am I getting that right?

Alex: Mhmm yeah.

Carys: Ok, can you tell me a bit about when you feel anxious. How does that feel in your body?

Alex: Um it's horrible, I get really hot and sweaty and like just so shaky and I think I'm going to like pass out or something and, yeah, it's just, it's so horrible.

Carys: It sounds horrible, and what, what are the thoughts that are going through your mind when you're feeling that way?

Alex: Um, I just think about like, what everyone is thinking about me, or like I'm doing the wrong thing, or like I'm going to say something weird, or like people think I'm weird or like, I'm just going to just get everything wrong

Carys: That sounds really difficult Alex and I'm glad that you were able to refer, to, to talk to your GP and be here today to talk about it. Hopefully we can make a plan together to try and to try and help you manage that better.

But I, I think I'd like to know a bit more about how it's impacting other areas of your life so how how's your sleep been?

Alex: Um oh, it's not really great because it’s just really noisy, um and I find it really hard to sleep there's just always like a noise outside and yeah and then if, I when I don't sleep then I feel more anxious and then I just don't want to go anywhere or do anything so yeah.

Carys: Ok so on average about how many hours of sleep do you say you get at night?

Alex: Um it would probably be like maybe three to four but like sometimes I fall asleep and wake up but yeah probably be three to four.

Carys: My gosh, that sounds really difficult. I think I would also feel quite overwhelmed if, if I was not getting enough sleep, and three to four hours sounds like very little. Um, I'm also wondering, so in the middle of all of this, are you getting any support from anyone?

Alex: Um, I guess. My family are supportive, they’re, they don't really understand but they do try, and like they phone and stuff, but I keep getting quite like annoyed at them, like getting, like snappy and get just like, not angry, but like, just quite like, frustrated quite easily, um but the Uni have

been good and quite like accommodating. Um. But who else, um I guess like I kind of have friends, but I don't really see them or really talk to them that much.

Carys: Ok, and that's changed in the past seven months? You used to hang out with them a bit more prior to that?

Alex: Um, I guess not loads but like we're not super close but yeah like I did do some stuff like I would go out and do some stuff.

Carys: Ok, so it sounds like the, the feelings of anxiety have been impacting a lot of different areas of your life including your, your friends and your sleep and your academic work and as I said we can make a plan together to help with that so maybe in our next session we can discuss what you would like out of therapy and we can put some goals together and then take it from there. Does that sound ok?

Alex: Yeah, that, yeah that's fine

Carys: Ok, so we'll make an appointment for next week then and, then pick things up there.

Alex, Ok, thank you very much.

Carys: You're welcome it's been a pleasure speaking with you.

Appendix R – TDRP Measure 1

Measure 1 – Questionnaire 1:

1. *How well would she respond to 12 sessions of CBT for her anxiety problem?*

0 10 20 30 40 50 60 70 80 90 100

Not well Extremely well

2. *How likely is it that her anxiety problem would be in remission at the end of 12 sessions of CBT?*

0 10 20 30 40 50 60 70 80 90 100

Not at all likely Extremely likely

3. *How likely is it that she would be able to return to her original level of social functioning after 12 sessions of CBT?*

0 10 20 30 40 50 60 70 80 90 100

Not at all likely Extremely likely

4. *How likely is it that she would be able to return to her original level of being capable to be able to meet her academic demands after 12 sessions of CBT?*

0 10 20 30 40 50 60 70 80 90 100

Not at all likely Extremely likely

Measure 1 – Questionnaire 2:

1. How well would Alex understand the therapeutic rationale developed by the therapist?

0 10 20 30 40 50 60 70 80 90 100

Not well Extremely well

2. How easy do you think it would be to form a good therapeutic alliance with Alex?

0 10 20 30 40 50 60 70 80 90 100

Not at all likely Extremely likely

3. How well will she be able to engage in CBT?

0 10 20 30 40 50 60 70 80 90 100

Not at all likely Extremely likely

4. *How able do you think this client would be to reflect on her emotions?*

0 10 20 30 40 50 60 70 80 90 100

Not at all likely Extremely likely

Appendix S – TDRP Measure 2

Measure 2:

1. *How optimistic are you for the client's treatment and outcome and why?*

2. *Do you have any concerns about the client's treatment and outcome and why?*

3. *Any other thoughts about your work with this client?*

Appendix T – TDRP Measure 3

Measure 3

Demographic Information	
What sex were you assigned at birth?	Male/ Female
Do you still identify at this? If not, please state your gender if you wish.	Yes/ No/ Prefer not to say (Free text)
How old are you?	(Free text)
What is your ethnic group? Please choose on option that best describes your ethnic group or background	**White** English/Welsh/Scottish/Northern Irish/British Irish Gypsy or Irish Traveller Any other White background **Mixed/Multiple ethnic groups** White and Black Caribbean White and Black African White and Asian Any other Mixed/Multiple ethnic background **Asian/Asian British** Indian Pakistani Bangladeshi Chinese Any other Asian background **Black/ African/Caribbean/Black British** African Caribbean Any other Black/African/Caribbean background, **Other ethnic group** Arab Any other ethnic group

What is the highest level of education you have completed?	No formal schooling/less than primary school/primary school completed/secondary or high school completed/University degree completed/post graduate degree completed
Which of the following best describes your main work status over the past 12 months?	Unemployed, employed full-time, employed part-time, retired, choose not to be employed, student
What is your civic status?	Single, living with a partner, Married, divorced, or separated, widowed, prefer not to say

Part Two: Professional Status

What are your professional qualifications?	(Free text)
Are you currently delivering CBT treatment to adults with anxiety?	Yes No
How many years have you been treating adults with psychological	(Free Text)

problems/psychiatric disorders?	
In what context do you work? (Please select all that apply)	NHS Private International
With which populations do you work? (Please select all that apply)	Working Age Adults Children and Young People Older Adults Learning Disability Neurodiversity Other (Free Text)
Which of the following treatments for anxiety would you personally feel able to carry out?	Pharmacology Psychotherapy CBT Exposure Treatment Relaxation Other (Free Text)

Part Three: Perceptions of Anxiety Disorders

This part of the study involves your perception of anxiety disorder

A. Please indicate your view of the effectiveness of the following modes of intervention with anxiety disorder from 0 (not at all) to extremely effectiveness (100)

Pharmacotherapy: 0 10 20 30 40 50 60 70 80 90 100

Psychotherapy: 0 10 20 30 40 50 60 70 80 90 100

Cognitive behaviour 0 10 20 30 40 50 60 70 80 90 100

Therapy (CBT):

Exposure treatment: 0 10 20 30 40 50 60 70 80 90 100

Relaxation: 0 10 20 30 40 50 60 70 80 90 100

Not at all Extremely

Effective effective

Appendix U – TDRP Debrief Sheet

Oxford Institute for Clinical Psychology Training and Research Isis Education Centre, Warneford Hospital Oxford, OX3 7JX

Research Team
Trainee Clinical Psychologist: Nicola Roche
External Supervisor:
Internal Supervisor: Prof. Paul Salkovskis

Contact
nicola.roche@psy.ox.ac.uk

UNIVERSITY OF OXFORD

AN INVESTIGATION INTO CLINICIAN'S JUDGEMENT OF ANXIETY DISORDER TREATMENT

DEBRIEFING SHEET

Central University Research Ethics Committee (CUREC)

Approval Reference: R93179/RE001

Thank you for your participation in our study titled " An Investigation Into Clinician's Judgement Of Anxiety Disorder Treatment " The purpose of this study was to examine how different referral information influences clinicians' expectations of outcomes when watching a vignette.

Procedure:

During the study, you were provided with specific referral information regarding the patient. You were then asked to watch a short vignette depicting a scenario related to an assessment for anxiety. After watching the vignette you were asked to complete a questionnaire.

Referral Information:

You will have received one of three different packets of information. This would have been one of:

- Basic background information;
- Additional information about some characteristics that might suggest neurodiversity is present;

or

- Additional information that ASD had been raised as a possible complicating factor

We then evaluated whether this additional information impacted on judgements made about the service user and their prospects for treatment.

Questionnaire:

The questionnaire aimed to assess your expectations for outcomes related to the vignette based on the referral information provided. It included questions about your anticipated treatment plan, perceptions of the situation, and expectations for outcomes.

Debriefing:

Although the video was based on real cases, it was recorded using role play strategies with people enacting those roles. The study was designed to explore the influence of potential autism on clinicians' expectations for outcomes. You were provided with 3 different levels of referral information, with additional background information provided – one referral described symptoms of anxiety, the second referral had additional information

describing some autistic traits and the third referral level suggested that these traits might be indicative of potential autism.

Confidentiality and Anonymity:

Rest assured; all the information collected during this study will be kept confidential. Your responses will remain anonymised and will only be used for research purposes.

Contact Information:

If you have any questions or concerns about the study, please feel free to contact Nicola Roche at nicola.roche @psy.ox.ac.uk

Thank You:

We sincerely appreciate your time and effort in contributing to this research. Your participation is invaluable and helps us gain insights into important psychological processes.

Once again, thank you for your participation.

Sincerely,

Nicola Roche

Appendix V – TDRP Codes for Optimism and Pessimism

Optimism code	Pessimism code
Engaged	Flat affect
Previous experiences/history	Social withdrawal
Social Support	Situational
Motivated	Neurodiversity
Rapport	Query Comorbidity (not neurodiversity)
Early intervention	Rapport
Insightful/Psychological mindedness	Commitment/Competing demands
	Emotional Awareness
Clear goals	Complexity
Specific Trigger	Therapist Experience/Clinician factors
CBT established	Level of anxiety/discomfort in room
Education/Intelligence	Lack of goals
Ways of responding	Not engaged
Clinician factors	Safety behaviour
No complexity	Tolerance of emotion
Commitment	Further assessment
Neurodiversity traits	Avoidance
	Compliant
	Motivation
	High standards
	Stage of life
	Attention
	Hopelessness

Appendix W - TDRP CUREC Approval

MEDICAL SCIENCES INTERDIVISIONAL RESEARCH ETHICS COMMITTEE
Research Services, Boundary Brook House, Churchill Drive, Headington, Oxford, OX3 7GB
Tel: +44(0)1865 616575
ethics@medsci.ox.ac.uk

CONFIDENTIAL

Professor Paul Salkovskis & Nicola Roche
Oxford Institute for Clinical Psychology Training and Research (OxICPTR)
Isis Education Centre
Warneford Hospital
Oxford

18 June 2024

Dear Professor Salkovskis and Nicola,

Research Ethics Approval - CUREC 1

Ethics Approval Reference: R93179/RE001

Study title: An Experimental Investigation of the Impact of Autism Spectrum Diagnosis on Clinicians' Judgement of Anxiety Disorder

Short title: An investigation in to clinician's judgement of anxiety disorder treatment

The above application has been considered on behalf of the Medical Sciences Interdivisional Research Ethics Committee (MS IDREC) in accordance with the University's procedures for ethical approval of all research involving human participants.

I am pleased to inform you that, on the basis of the information provided to the IDREC, the proposed research has been judged as meeting appropriate ethical standards, and approval has been granted from **18th June 2024** until **17th December 2025.**

Insurance-provided indemnity arrangements are in place for the duration of the approval stated above. It is your responsibility to ensure that you request an extension to the end date for indemnity to remain in place should you continue the research beyond the dates covered.

Amendments

Should there be any subsequent changes to the study, you should submit details to the MS IDREC for consideration and approval. Details of changes must be listed on an amendment form.

Yours Sincerely

DocuSigned by:
Leah Butts
9F14889D2BC549A...

Mrs Leah Butts
Research Ethics Administrator

for
Dr Helen Barnby-Porritt
Research Ethics Manager

Appendix X - SRL Prospero Registration

What is the prevalence of Social Anxiety and Eating Disorder in children and adolescents, and what are the patterns of comorbidity between these conditions?

Nicola Roche, Joanna Adams

Citation
Nicola Roche, Joanna Adams. What is the prevalence of Social Anxiety and Eating Disorder in children and adolescents, and what are the patterns of comorbidity between these conditions?. PROSPERO 2024 CRD42024569372. Available from https://www.crd.york.ac.uk/PROSPERO/view/CRD42024569372.

PREVIEW

REVIEW TITLE AND BASIC DETAILS

Review title
What is the prevalence of Social Anxiety and Eating Disorder in children and adolescents, and what are the patterns of comorbidity between these conditions?

Review objectives
What is the prevalence of social anxiety symptoms in children and young people with eating disorder diagnosis?What are the vulnerability and maintenance factors common between eating disorders and social anxiety symptoms as reported in the existing literature?

What are the implications for treatment outcomes when both social anxiety symptoms and eating disorder diagnosis are co-occurring?What are the implications for clinical practice?

Keywords
Eating Disorder; prevalence; risk factors; Social Anxiety Disorder; Young people; Outcomes

SEARCHING AND SCREENING

Searches
The following databases will be used: PsycINFO, Scopus, EMBASE, CINAHL and MEDLINE.Restrictions: English language

Study design
Both randomized and nonrandomized study types will be included.

Included
English Language, peer-reviewed articles, empirical studies and qualitative studies focusing on social anxiety and eating disorder diagnosis (specifically BN, AN and BED), studies focusing on vulnerability and maintenance factors of both SAD and ED.

ELIGIBILITY CRITERIA

Condition or domain being studied
Social anxiety disorder; Eating Disorder; Social Phobia

• Social Anxiety Disorder• Social Phobia • Eating Disorder (including: anorexia, bulimia, binge eating disorder)

Population

Included
Inclusion: Young people with diagnosis of eating disorder (specifically BN, AN and BED) and social anxiety symptoms (ages 10-24).

Excluded
Exclusion: Those under 10 and over 24.

Intervention(s) or exposure(s)

Included
Any study looking at prevalence and co-morbitity of eating disorders and social anxiety symptoms in young people aged 10-24

Comparator(s) or control(s)
This review does not have any comparators

Context
Eating disorders (ED) encompass a range of syndromes characterized by problematic eating behaviors and associated thoughts and emotions. Individuals with EDs often exhibit preoccupations with food, body weight, and shape (NIMH, 2024). Social Anxiety Disorder (SAD), also known as Social Phobia, is marked by a persistent fear of social interactions due to concerns about being judged by others (Schneier & Goldmark, 2015). SAD is frequently comorbid with EDs, with prevalence rates in Anorexia Nervosa (AN) ranging from 16-88.2%, and in Bulimia Nervosa (BN) from 17-67.8%, compared to 12% in the general population (Harrison et al., 2018; Swinbourne, 2008; Kessler et al., 2005). This association is also evident in non-clinical populations (Harrison et al., 2018).Despite the growing literature on the connection between SAD and ED, the underlying mechanisms remain unclear. Common vulnerability factors, such as fear of negative evaluation, perfectionism, and concerns about social appearance, have been proposed (DeBoer et al., 2013; Levinson et al., 2013; Shafran et al., 2002). Additionally, SAD can be a barrier to seeking support for ED (Goodwin & Fitzgibbon, 2002).Young people are particularly at risk, with the median onset of SAD at 13 years and 90% of diagnoses by age 23 (Beesdo et al., 2010). Early mental health issues can impede developmental milestones and transition to adulthood, leading to poorer long-term outcomes (Asselmann et al., 2018). Increasing rates of ED and SAD across cultures highlight the need for culturally sensitive interventions(Jefferies & Ungar, 2020; Levinson et al., 2013).

OUTCOMES TO BE ANALYSED

Main outcomes
Social anxiety symptoms are consistently found to be a common comorbid anxiety disorders in individuals with ED. Social Anxiety and ED can initially present in young people. The absence of specific literature regarding the comorbidity of these two disorders could potentially impact understanding of the presentation and treatment of these disorders in young people. The present study will focus on commonalities across the following factors:

- prevalence

- vulnerability/maintenance factors

- Implications for treatment outcomes

- Implications for clinical practice

Additional outcomes
Not applicable

DATA COLLECTION PROCESS

Data extraction (selection and coding)
Selection Process: Titles and abstracts will be screened adhering to predetermined inclusion and exclusion criteria. Subsequently, full-text articles of potentially relevant studies will be assessed for eligibility. A subset of 20% of papers abstract/titles and a further subset of 20% of full-texts will be reviewed by second researcher, with any discrepancies will be resolved through discussion or by involving the supervisor. Cohen's Kappa will be used to measure inter-rater

reliability (Cohen, 1960).Data Extraction:A standardized data extraction template will be created to gather pertinent details from every study included. This template will include information about co-morbidity, prevalence, study methodology, participant demographics, and significant findings concerning co-morbitity and prevalence of social anxiety symptoms and eating disorders.Data Extraction Process:The lead researcher will perform the extraction, and any discrepancies will be addressed during research supervision. A second researcher will review and extract data from a subset of 50% included papers.

Risk of bias (quality) assessment
The quality of papers will be evaluated using the QualSyst checklist as the initial scoping review identified studies with multiple designs (Maddocks, 2019). At least 50% of the papers will be assessed by a second researcher. Any disagreements will be reviewed with the research supervisor. Inter-rater reliability will be evaluated using Cohen's kappa (Cohen, 1960).

PLANNED DATA SYNTHESIS

Strategy for data synthesis
• Thematic coding will involve identifying recurring themes and patterns across the studies.• A narrative framework will be develop that arranges the identified themes in a logical sequence, forming a coherent and structured narrative that conveys a story. Findings across studies will be compared and contrasted highlighting the similarities and differences in co-morbidity and prevalence across studies.• Findings will be contextualised by examining the characteristics of the studies, populations, and settings. This discussion aims to help readers grasp the significance and applicability of the identified co-morbid factors for young people experiencing symptoms of social anxiety and eating disorders.• Findings will be considered in light of the quality appraisal• A summary of the main findings will be provided and conclusions will be drawn from the synthesized information. The practical implications of the identified prevalence and co-morbid factors for this population will be discussed and suggestions for how this knowledge could guide future interventions or policies will be provided.

Analysis of subgroups or subsets
Not applicable

REVIEW AFFILIATION, FUNDING AND PEER REVIEW

Review team members
Ms Nicola Roche (review guarantor). University of Oxford & Oxford Health NHS Foundation Trust. England.

No conflict of interest declared.

Dr Joanna Adams. University of Oxford & Oxford Health NHS Foundation Trust. England.

No conflict of interest declared.

Review affiliation
University of Oxford & Oxford Health NHS Foundation Trust

Funding source
Review has no specific/external funding but is supported by guarantor/review team (non-commercial) institutions.

Additional information about funding
This systematic review is being completed as part of a doctoral course in clinical psychology at Oxford University funded by Health Education England.

TIMELINE OF THE REVIEW

Review timeline
Start date: 1 March 2025. End date: 30 September 2025.

Date of first submission to PROSPERO

22 July 2024

Date of registration in PROSPERO
14 October 2024

CURRENT REVIEW STAGE

Publication of review results
The intention is to publish the review once completed.The review will be publcished in English

Stage of the review at this submission

Review stage	Started	Completed
Pilot work	✓	✓
Formal searching/study identification	✓	✓
Screening search results against inclusion criteria	✓	✓
Data extraction or receipt of IPD		
Risk of bias/quality assessment		
Data synthesis		

Review status
The review is currently planned or ongoing.

ADDITIONAL INFORMATION

Additional information
Not applicable

PROSPERO version history

- Version 1.0, published 14 Oct 2024

Review conflict of interest
None known

Country
England

Other registration details
Not applicable

Medical Subject Headings
Adolescent; Child; Comorbidity; Fear; Feeding and Eating Disorders; Humans; Phobia, Social; Prevalence

Revision note
Amendments have been made to clarify the research aims

Disclaimer
The content of this record displays the information provided by the review team. PROSPERO does not peer review registration records or endorse their content.

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Any enquiries about the record should be referred to the named review contact

Appendix Y: TDRP G* Power Output

