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Complexity in Child and Adolescent Mental Health: Comorbidity of ADHD and PTSD, and Practitioner Perspectives on Identifying Borderline Personality in Young People

Kathryn O'Hare, MA(Hons), MSc

Submitted in partial fulfilment of the requirements for the degree of

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School of Health and Wellbeing

College of Medical, Veterinary and Life Sciences

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To my friends I have met on training and long before. For the check ins, the laughs and the podcast length voice notes. The understanding that comes from the shared experiences of trainee friends has been so important in making it through this process. And to my friends outside of this bubble, thank you for pulling me back into life beyond training and for keeping me laughing, all while navigating your own busy lives. It has been so appreciated.

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Finally, for my dad. I know you would be proud.

Chapter 1: Systematic Review

Attention Deficit Hyperactivity Disorder and Post-Traumatic Stress Disorder in Children & Young People: A Systematic Review of Comorbidity and Shared Mechanisms

Prepared in accordance with the author requirements for Journal of Attention Disorders; https://journals.sagepub.com/author-instructions/jad

Abstract

Background: Attention-deficit/hyperactivity disorder (ADHD) and post-traumatic stress disorder (PTSD) frequently co-occur, and their overlapping symptomatology complicates accurate diagnosis. While this comorbidity is documented in adults, its prevalence and underlying mechanisms in children and adolescents remain poorly understood. This review aimed to derive pooled prevalence estimates for co-occurring ADHD and PTSD in young people aged ≤18, and to synthesise evidence on the mechanisms underlying the overlap.

Methods: A systematic search of three databases (PsycINFO, Embase, and MEDLINE) identified 11 eligible articles, six of which provided sufficient data for meta-analysis. Studies were independently appraised by two reviewers using the Crowe Critical Appraisal Tool. Prevalence was pooled separately by direction of ascertainment (PTSD-in-ADHD vs ADHD-in-PTSD) using random-effects meta-analysis. A narrative synthesis integrated findings from studies not eligible for pooling and examined the mechanisms underpinning co-occurrence.

Results: Meta-analysis yielded a pooled PTSD prevalence within ADHD samples of 10.9% (95% CI 5.1-18.4) and pooled ADHD prevalence within PTSD samples of 24.5% (95% CI 14.5-36.0), both with moderate heterogeneity (I^2 = 59.6% and 55.0% respectively). Both estimates substantially exceed general-population base rates for either disorder alone, but rest on only three studies per pool and should therefore be interpreted with caution, with correspondingly imprecise heterogeneity estimates. Narrative synthesis identified two candidate mechanistic pathways: environmental exposure and symptom overlap (including detection bias).

Conclusions: Co-occurring ADHD and PTSD is not rare in young people with either diagnosis and appears to arise through multiple mechanisms rather than one, with the strongest evidence suggesting that some of the apparent overlap reflects shared symptomatology. This underscores the need for differential assessment of both conditions within psychiatric evaluation and supports routine bidirectional screening. Adequately powered, mechanism-testing research in this age group remains a priority.

Keywords: ADHD; PTSD; adolescents; prevalence; meta-analysis

Systematic review registration: PROSPERO CRD420261302485; https://www.crd.york.ac.uk/PROSPERO/view/CRD420261302485

Background

Post-Traumatic Stress Disorder (PTSD) is characterised by hyperarousal, intrusive memories and cognitive impairment (APA, 2022) and is estimated to have a global lifetime prevalence of 3.9% (WHO, 2024). Following a traumatic event, 5.6% of the general population will develop PTSD (Koenen et al., 2017). Pooled prevalence of PTSD in trauma exposed adolescents is estimated at 15-25% (Visser et al., 2025), with variation partly explained by type of trauma and gender (Alisic et al., 2014). Although up to 70% of individuals are exposed to potentially traumatic events in their lifetime (Kessler et al., 2017), most will not develop PTSD, suggesting some may have predisposing risk factors.

Neurodivergence, including Attention-Deficit Hyperactivity Disorder (ADHD), is linked with diverse developmental outcomes including PTSD, and core ADHD features can affect functioning and emotional regulation across the lifespan. Global prevalence of ADHD is around 3% in adults and 8% in children and adolescents (Ayano et al., 2023; 2024). In paediatric clinical settings, it reaches 32% (Johnson et al., 2026).

ADHD is increasingly understood within a neurodiversity-affirming framework, ie as a variation in neurodevelopment rather than a fixed deficit. This locates the functional impairment and psychosocial morbidity associated with ADHD in the mismatch between an individual's neurodevelopmental profile and their environment (Sonuga-Barke & Thapar, 2021).

In contrast, PTSD is conceptualised as a stress-response disorder arising from exposure to a discrete or cumulative traumatic event, with symptoms understood as a disruption to normal fear-learning and threat-appraisal systems rather than a lifelong trait (APA, 2022). This distinction matters clinically and developmentally, as both conditions present differently across childhood. ADHD can be particularly difficult to diagnose reliably in early childhood (roughly ages 2–5): high activity levels, short attention spans, and impulsivity are normative at this stage, making it difficult to distinguish developmentally typical behaviour from clinically significant symptoms (Sonuga-Barke & Halperin, 2010). From middle childhood into adolescence, presentation shifts further: overt hyperactivity tends to become less visible, while inattention and impulsivity persist and increasingly manifest as disorganization, poor

time management, or risk-taking (Sonuga-Barke & Halperin, 2010). PTSD shows a parallel but distinct developmental pattern: younger children are more likely to present with somatic complaints, regression, or re-enactment of traumatic events through play, often without the ability to verbally articulate distress, whereas adolescents more closely resemble the adult presentation, with verbally-mediated re-experiencing, avoidance, and negative alterations in mood and cognition (Scheeringa et al., 2011). Where the two conditions co-occur, developmental stage may therefore influence not only symptom presentation but the risk of misattribution between the two diagnoses; a possibility considered further below. This risk is arguably greatest in early-to-middle childhood, precisely where both disorders' presentations are least distinct from normative developmental variation and from each other.

ADHD's characteristic impulsivity and risk behaviour have been proposed as PTSD risk factors, increasing the likelihood of experiencing trauma (Spencer et al., 2016). Neuroimaging and cognitive studies also show overlapping prefrontal cortex impairment and attention deficits in both conditions (Gamo & Arnsten, 2011). A systematic review by Spencer and colleagues (2016) found a robust, bi-directional association between ADHD and PTSD, with the highest comorbidity risk in studies comparing ADHD populations to 'normal' controls: a fourfold increase. ADHD onset was also consistently reported to precede PTSD onset, supporting ADHD as a contributing factor to PTSD.

The increased PTSD risk in individuals with ADHD cannot be explained by trauma exposure alone. Spencer et al. (2016) called for further research into the underpinning neurobiological mechanisms, which remain unclear. Several have been proposed: behavioural (impulsivity increasing trauma exposure: Spencer et al., 2016), biological (overlapping neural circuits and shared genetic liability making a strong argument for phenotypic overlap; Arnsten, 2009; Faraone & Mick, 2010), Kremen et al., 2012; and developmental (adversity interacting with neurodevelopmental vulnerability to amplify risk, though shared familial liability may account for part of the association; Dinkler et al., 2017). These findings suggest that co-occurrence likely arises through multiple interacting pathways.

Spencer et al. (2016) synthesised evidence on the ADHD-PTSD association across the lifespan, while Magdi et al. (2025) focused exclusively on adults. Yet children and adolescents, the developmental period in which ADHD typically emerges, and in which trauma exposure may have particularly profound consequences, have not been the subject of any systematic review of this comorbidity. Nor has any review comprehensively examined the proposed underpinning mechanisms. This review therefore aims to analyse the literature on ADHD-PTSD comorbidity in children and adolescents (≤18 years), with a secondary aim of synthesising evidence on the proposed underpinning mechanisms via narrative synthesis.

Review Questions

Primary Research Question

1. What is the prevalence of co-occurring ADHD and PTSD in the child and adolescent population?

Secondary Research Question

2. What are the underlying mechanisms which explain comorbid ADHD and PTSD in this population?

Methods

Registration

This review was registered (https://www.crd.york.ac.uk/PROSPERO/view/CRD420261302485) with the International Prospective Register of Systematic Reviews (PROSPERO) and written in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA 2020) checklist (Appendix 1.1).

Search Strategy

A systematic search of published studies examining overlapping prevalence of ADHD and PTSD in young people was conducted on 22nd June 2026 using PsycINFO (OVID), Embase (OVID) and MEDLINE (OVID). Search terms were developed from scoping searches and previous Cochrane reviews of PTSD and ADHD (Gillies et al., 2016; Brown et al., 2024). The search strategy was refined in consultation with an expert in the field, with reference to previous systematic reviews of ADHD and PTSD including adult populations (Spencer et al., 2016; Magdi et al., 2025) to maximise sensitivity and relevance. Searches were limited to human subjects and English language, and used Boolean operators (AND/OR). Search strategies are in Appendix 1.2.

Eligibility Criteria

As this review examines the comorbid prevalence rather than intervention effectiveness, the SPIDER framework (Cooke et al., 2012) was used to define inclusion and exclusion criteria.

Inclusion Criteria

- Sample: Children and young people aged ≤18 years with operationalised ADHD and PTSD diagnoses using a standardised assessment tool or whose DSM or ICD diagnostic code was recorded.
- Phenomenon of interest: Comorbidity of ADHD and PTSD in children and young people (age ≤18).
- Design: Original peer-reviewed research in English using cohort, cross-sectional, longitudinal or observational designs.
- Evaluation: At least one of: prevalence rates or overlaps and differences in mechanism.
- Research: Quantitative studies

Exclusion Criteria

- Sample: Participants >18 years old; studies not separating child/adolescent data from adult data; or studies not directly examining ADHD and PTSD diagnosed using standardised tools.
- Phenomenon of Interest: Studies focusing on only one disorder (PTSD or ADHD) without co-morbid prevalence or comparison, or on self-reported traits; studies failing to differentiate ADHD from non-specific or sub-syndrome attention deficits, or PTSD from other trauma sequelae, or studies failing to assess PTSD and ADHD using standardised assessment.
- Design: Non-peer reviewed studies, case studies, reviews, editorials or commentaries.
- Evaluation: Studies not reporting on key outcomes such as prevalence or mechanisms, or using measures with a broader, non-specific focus.
- Research: Purely qualitative studies producing no prevalence estimates or quantifiable comparisons.

Review Process

Using search terms specified above, searches were carried out on relevant databases by the lead reviewer (KO'H). All records were exported to Rayyan (https://www.rayyan.ai), a systematic review management platform, which removed most duplicates. The lead reviewer then screened titles and abstracts against the inclusion and exclusion criteria. A second reviewer (EM, Trainee Clinical Psychologist) independently completed title and abstract screening of 10% of these papers (278/2778) with 98.6% inter rater concordance; discrepancies related to insufficient detail on ADHD or PTSD diagnosis or co-occurrence, and were resolved by discussion to 100% agreement.

Records meeting inclusion criteria underwent full-text screening by the lead reviewer, with 10% (5/47) also reviewed by the second reviewer, achieving 100% concordance.

Backward and forward citation searching was completed for included papers (N=11).

Data Extraction and Quality Appraisal

Quality appraisal and data extraction for all included studies were conducted in accordance with the Crowe Critical Appraisal Tool (CCAT; Crowe & Sheppard, 2011; Appendix 1.3), chosen for its methodological versatility across heterogeneous study designs and its psychometrically demonstrated construct validity (Crowe & Sheppard, 2011). It is structured across eight domains, comprising 22 items in total: Preliminaries, Introduction, Design, Sampling, Data Collection, Ethical Matters, Results, and Discussion. Each domain is scored using a standardised 0-5 point rating scale, from which a total score and corresponding percentage are calculated. As the CCAT lacks a predefined framework for score interpretation, this review applied a quality classification used within prior Child and Adolescent Psychiatry systematic reviews (Lang et al., 2020): Very High-Quality (VHQ; ≥35), High-Quality (HQ; ≥30), Moderate-Quality (MQ; ≥20), and Low-Quality (LQ; <20).

The lead reviewer assessed all N=11 included studies for quality, with the second reviewer (EM) independently appraising the same studies using CCAT to ensure consistency and minimise subjective bias. Initial agreement on the final quality category was reached for nine of the eleven studies (81.8% inter-rater agreement). Discrepancies in CCAT domain levels and final quality ratings were resolved through structured discussion against CCAT criteria, reaching 100% agreement.

Data Analysis

The primary aim of this systematic review was to derive a pooled prevalence estimate for ADHD-PTSD co-occurrence in young people ≤18 years. Included studies were drawn from two sampling directions (PTSD prevalence within ADHD samples versus ADHD prevalence within PTSD samples) and used distinct methods of diagnostic ascertainment (structured clinical interview versus administrative diagnostic code). This was judged to make combination into one large meta-analysis unsuitable. Instead, pooled prevalence was synthesised across two separate interview-based random-effects meta-analyses rather than one combined estimate. Studies were eligible for inclusion in either pool if they reported sufficient data to calculate a

proportion (ie, total sample size and count of co-occurring cases) using structured clinical interviews as the diagnostic method.

A proportion meta-analysis was performed in RStudio using the metaprop function (meta package; Balduzzi et al., 2019). A random-effects model was implemented using the inverse-variance method, with τ^2 derived via the DerSimonian and Laird (1986) estimator. The Freeman-Tukey double arcsine transformation (Freeman & Tukey, 1950) was applied to stabilise variance and account for prevalence rates being constrained between 0 and 1, particularly given the small sample sizes and estimates approaching the boundaries in several included studies. Pooled estimates were subsequently back-transformed to the original proportion scale for interpretability. Individual study proportions were calculated using Clopper-Pearson exact confidence intervals. Cochran's Q statistic tested for heterogeneity across estimates within each pool, and the Higgins and Thompson (2002) Inconsistency Index (I^2) quantified its magnitude, with confidence intervals derived by the Jackson (2013) method; τ^2 and I^2 were reported as complementary measures of between-study variance.

As each directional pool comprised only three studies, heterogeneity statistics were interpreted cautiously, as both point estimates and their intervals are known to be imprecise at small k. Leave-one-out sensitivity analysis (metainf) assessed the influence of individual studies on the pooled estimate and heterogeneity for both pools, and a forest plot visualised study-level and pooled proportions for each. Egger's regression test for publication bias was not performed, as fewer than ten studies were available in either pool. This followed recommendations cautioning that the test has limited power and unreliable results in small meta-analyses (Sterne et al., 2011).

Given the same directional and methodological variation described above, narrative synthesis (Popay et al., 2006) was also used to integrate findings across all studies. This included those not included in the meta-analyses, and identified mechanisms underlying the ADHD-PTSD association. Studies were again grouped by direction of co-occurrence (PTSD-in-ADHD versus ADHD-in-PTSD), and patterns, consistency, and divergence in proposed mechanisms were examined within each group, with close attention paid to sample characteristics and methodological quality (CCAT v1.4; Crowe & Sheppard, 2011). The narrative approach

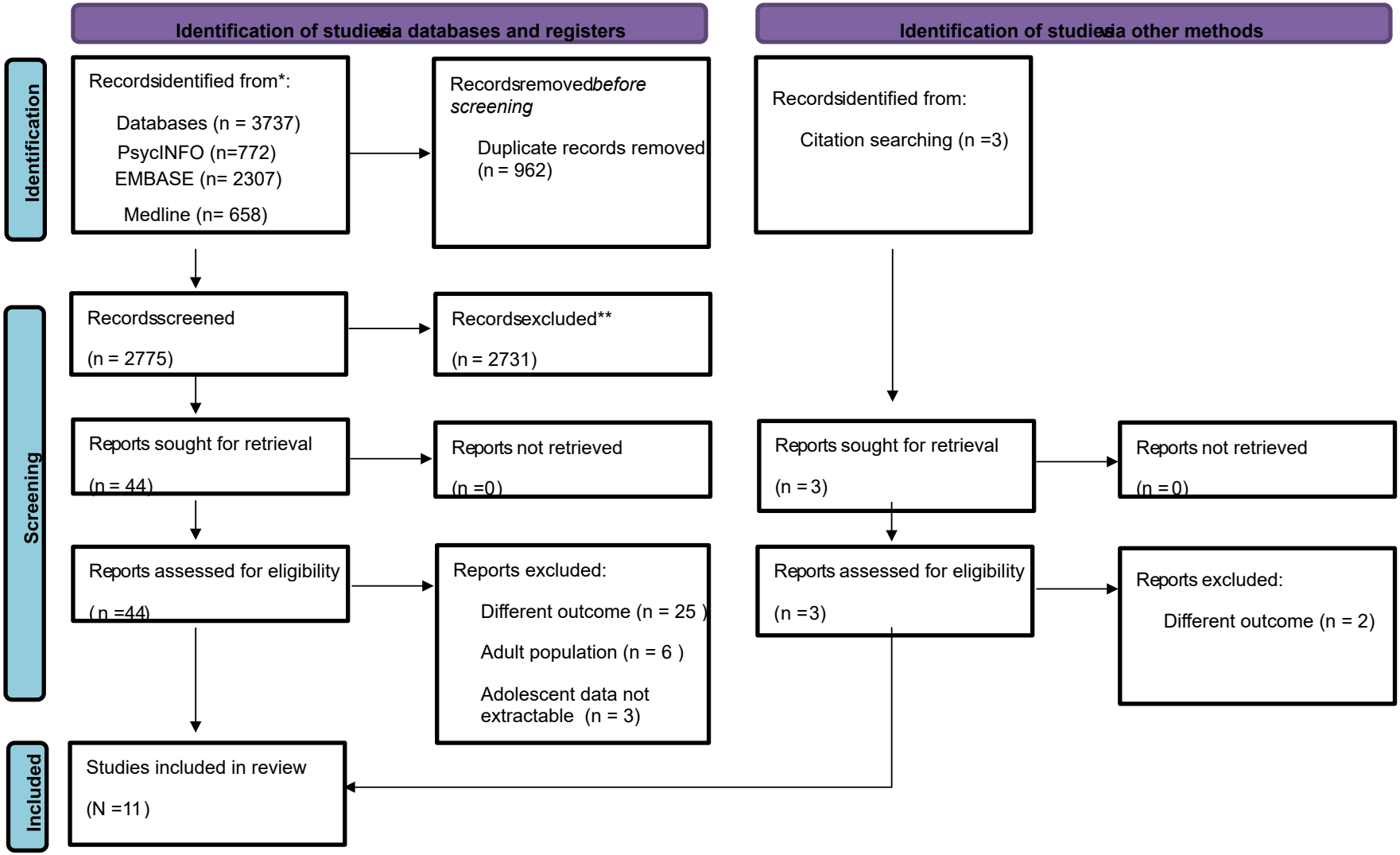
accounted for heterogeneity in study design, measures, and conceptualisation of mechanisms, and enabled theoretically informed integration of evidence not amenable to statistical pooling.

Results

Study Selection

A total of 3,737 articles were retrieved across the databases searched (APA PsycInfo = 772; EMBASE= 2307; MEDLINE=658). After removal of duplicates, 2775 studies remained for screening, of which 2,731 were excluded at title and abstract stage. Forty-four articles were eligible for full text screening, with a further 3 identified via backwards and forward citation searching, taking the total to n=47. Of these, 36 were excluded, leaving 11 articles eligible for this systematic review. Six provided sufficient data for inclusion in the meta-analysis (n=3 for Direction A: PTSD in ADHD and n=3 for Direction B: ADHD in PTSD). Figure 1 below details the search screening and selection process.

Figure 1. PRISMA 2020 Study Identification Flowchart



Study Characteristics

All included studies (n=11) were observational: six cross-sectional (Famularo et al., 1996; Dixon et al., 2005; Daud & Rydelius, 2009; Ünver & Karakaya, 2019; Seo et al., 2022; Smith et al., 2026), two prospective birth cohort (Smalley et al., 2007; Christoffersen & Thorup 2024), two retrospective study designs (Ford et al., 2000; Baweja et al., 2026) and one clinical audit (Mpondo et al., 2026).

Participant Characteristics

The eleven included studies varied markedly in scale and design, reflecting the heterogeneity of the evidence base. Three were large-scale administrative or register-based studies with very large samples (Seo et al., 2022, under-18 subgroup N = 819,133; Baweja et al., 2026, N = 714,129; Christoffersen & Thorup, 2024, N = 679,000), while the remaining eight were considerably smaller clinical or community samples, ranging from 50 to 457 participants. Because of this disparity, a single pooled demographic summary would be dominated by the register-based datasets and is not reported; demographic characteristics are instead presented by study in Table 1. Samples spanned general-population cohorts, national registers, clinical outpatient services, and justice/welfare settings across eight countries, and sex distribution and mean age varied substantially by study and ascertainment context (see Table 1).

TABLE 1: STUDY CHARACTERISTICS

Study	Country	Study Design	Sample Characteristics	Sample Setting	Measure of PTSD Diagnosis	Measures of ADHD Diagnosis
Baweja et al. (2026)	USA	Retrospective cohort	Total N = 714,129 N = 30,341 with comorbid PTSD Age = 6-18 yr; ADHD+PTSD M = 10.8 (SD 3.4); ADHD-only M = 8.5 (SD = 3.3) Gender = ADHD-only 30.7% female; ADHD+PTSD 46.1% female Ethnicity (ADHD+PTSD): 17.1% unknown; 11.6% Hispanic or Latino; 71.3% not Hispanic or Latino.	Electronic health records	ICD-10-CM F43.1, code-based diagnosis	ICD-10-CM F90, code-based diagnosis
Christoffersen & Thorup (2024)	Denmark	Prospective birth cohort (register-based)	Total N = 679,000 Followed age 7-18	Danish Psychiatric Nationwide Case Register	ICD-10 F43.1 diagnosis	ICD-10 F90, diagnosis
Daud & Rydelius (2009)	Sweden	Cross-sectional, case-control	Total N = 80 Age = 7-16 Gender = 50% male, 50% female	Community	DICA-R-C (DSM-IV-TR); PTSS-C used to confirm symptoms	DICA-R-C (DSM-IV-TR); WISC-III; teacher-rated YCI and SDQ
Dixon et al. (2005)	Australia	Cross-sectional observational	Total N = 100 (female only) Age = 13.5-19 yr, M = 16.5, SD = 1.2 Ethnicity = Aboriginal 48%, White 33%, Polynesian/Maori 12%, Asian 6%, African American 1%	Incarcerated juvenile detention centre	K-SADS-PL PTSD Traumatic Events component; DSM-IV criteria	K-SADS-PL; DSM-IV criteria

Famularo et al. (1996)	USA	Cross-sectional observational	Total N = 117 Age = 6-12 yr Gender = 41% male, 59% female Ethnicity = 42% Black, 40% White, 18% 'Other'	Juvenile family court	DICA-C-R (DSM-III-R based); DICA-C-R responses sole determinant of PTSD status	DICA-C-R; DSM-III-R (DICA-R) criteria
Ford et al. (2000)	USA	Retrospective case-control	Total N = 165 Age = M = 12, SD = 3.4 Gender = 57% female, 43% male Ethnicity = 92% Caucasian, 8% African American, Hispanic, or Asian-Pacific Island	Outpatient	PTSD Checklist for Children-Parent Report (PCL/C-PR); parent rated 17 DSM-IV symptoms	Clinical diagnostic evaluation, DSM-IV criteria checklist (MTA multiple-gating protocol); parent reported SNAP-IV
Mpondo et al. (2026)	South Africa	Cross-sectional clinical audit	Total N = 111 Age = 10-17 yrs Gender = 86% male, 14% female	Outpatient	Clinician-recorded diagnosis; DSM-V criteria	Clinician-recorded diagnosis; DSM-V criteria
Seo et al. (2022)	South Korea	Cross-sectional (national database)	Total N = 819,133 (<18 yrs) Gender = 76.70% male, 23.30% female (whole dataset)	National health insurance database; inpatient & outpatient	ICD-10 code F43 (PTSD), claims-based diagnosis	ICD-10 code F90.0 (ADHD), claims-based diagnosis
Smalley et al. (2007)	Finland	Birth cohort (nested case control)	Total N = 457 Age = 16-18 yr (adolescents)	General population	K-SADS-PL; DSM-IV criteria	K-SADS-PL, DSM-IV criteria
Smith et al. (2026)	USA	Cross-sectional observational	Total N = 50 Age = 11-18 yr Race/ethnicity: 52% Black, 66% Latiné, 18% multicultural	Community	KSADS (DSM-5-TR)	DSM-5-TR criteria; Teen ADHD Self-Report Scale

Ünver & Karakaya (2019)	Turkey	Cross-sectional, clinical case control	Total N = 110 (68 PTSD, 42 OCD) Age: PTSD M = 13.07 (SD 2.86); OCD M = 12.97 (SD 2.84) Gender (PTSD sample) = 88.2% female, 11.8% male (OCD sample) = 54.8% female; 45.2% male	Outpatient	DSM-5 structured clinical interview; Posttraumatic Reaction Index	DSM-5 structured clinical interview; family interview and school-teacher records

Study Quality

Quality assessment scores for each study are presented in Table 2. Total scores ranged from 20 to 34 out of 40 (50%-85%), with all studies rated either moderate (N=5) or high (N=6).

Studies generally scored well on preliminaries, reflecting appropriate titles, abstracts, and clear writing; three brief-report or less reproducible papers scored slightly lower (Daud & Rydelius, 2009; Ünver & Karakaya, 2019; Smith et al., 2026). Introduction scores were similarly strong but variable, with three studies framing the literature gap or their aims less sharply (Ünver & Karakaya, 2019; Seo et al., 2022; Smalley et al., 2007). Study design was a consistent limitation, with several studies failing to name or justify their design or account for bias, and some relying on a single instrument (Famularo et al., 1996) or on broad, unvalidated administrative codes rather than a structured interview (Seo et al., 2022; Mpondo et al., 2026). Sampling varied most widely; the strongest studies used a whole-population census or a replicable, representative frame (Christoffersen & Thorup, 2024; Dixon et al., 2005; Baweja et al., 2026; Seo et al., 2022; Smalley et al., 2007), whereas most drew on clinical convenience samples without a size justification (Ford et al., 2000; Famularo et al., 1996; Daud & Rydelius, 2009; Smith et al., 2026; Mpondo et al., 2026) and no study reported a power calculation.

Data collection methodology was reasonable, with occasionally incomplete reporting of protocols or missing-data handling; the most rigorous study used validated instruments with blinding and independent re-rating (Smalley et al., 2007). Ethical reporting was more variable: most studies documented consent and confidentiality well (most fully in Smalley et al., 2007), but two reported little - no consent process was described in one (Daud & Rydelius, 2009) and ethical approval was largely absent in another (Ünver & Karakaya, 2019). Researcher subjectivities were almost never considered across the review. Results were generally strong, with clear findings and appropriate analysis, the main exception being a small-sample null result reported without confidence intervals (Ünver & Karakaya, 2019). Discussion quality was more variable, with some studies offering thinner interpretation against existing theory or more limited treatment of limitations and future directions (Famularo et al., 1996; Ünver & Karakaya, 2019).

TABLE 2. CCAT SCORING TABLE

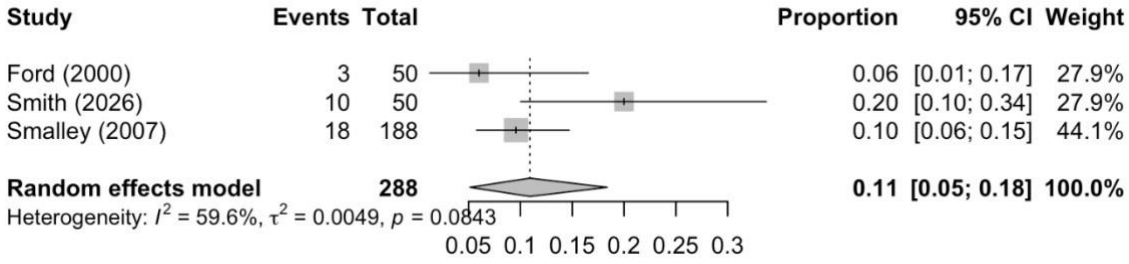
Study	Preliminaries	Introduction	Design	Sampling	Data Collection	Ethical Matters	Results	Discussion	Total (/40)	Percentage	Quality
Baweja et al., 2026	4	5	4	4	4	4	4	5	34	85%	**High**
Christoffersen & Thorup, 2024	4	4	4	5	4	3	4	4	32	80%	**High**
Daud & Rydelius, 2009	3	4	4	3	4	1	3	4	26	65%	**Moderate**
Dixon et al., 2005	4	4	4	4	4	4	4	5	33	82.5%	**High**
Famularo et al., 1996	4	4	3	3	3	4	4	3	28	70%	**Moderate**
Ford et al., 2000	4	5	4	3	4	3	4	5	32	80%	**High**
Mpondo et al., 2026	4	4	3	3	3	4	3	4	28	70%	**Moderate**
Seo et al., 2022	4	3	3	4	3	4	4	4	29	72.5%	**Moderate**
Smalley et al., 2007	5	3	4	4	5	5	4	4	34	85%	**High**
Smith et al., 2026	3	5	4	3	4	4	5	5	33	82.5%	**High**
Ünver & Karakaya (2019)	3	3	3	2	2	2	2	3	20	50%	**Moderate**

Prevalence of Co-morbid ADHD and PTSD

As set out in Methods, different directions of ascertainment and diagnostic methods meant studies could not be combined; prevalence was therefore synthesised across two separate pools: Direction A (PTSD-in-ADHD) and Direction B (ADHD-in-PTSD). As each pool comprised only three studies, heterogeneity statistics are reported but interpreted with caution - point estimates and confidence intervals are imprecise at small k; these figures are indicative only.

Direction A — PTSD within ADHD samples

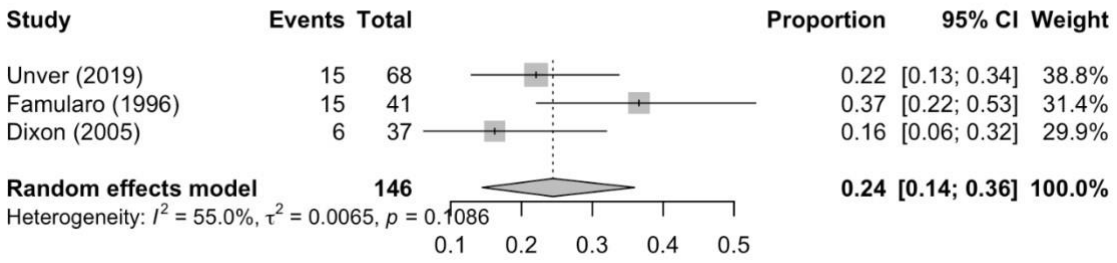
The first pool consolidated studies reporting PTSD prevalence among children and adolescents with ADHD (Ford et al., 2000; Smalley et al., 2007; Smith et al., 2026), reporting 31 cases of PTSD across 288 participants with ADHD. After Freeman-Tukey stabilisation, the pooled prevalence of PTSD was 10.9% (95% CI [5.1, 18.4]); study-level estimates ranged from 6.0% (Ford et al., 2000) to 20.0% (Smith et al., 2026). Heterogeneity was moderate (I^2 = 59.6%, 95% CI [0.0, 88.5]; τ^2 = 0.005; $Q(2)$ = 4.95, p = .084), though the very wide confidence interval (0-88.5%) around I^2 follows from having only three studies. A leave-one-out analysis indicated that the pooled estimate was stable, (8.6-13.5% with any single study omitted); heterogeneity was largely attributable to Smith et al. (2026), the study with the highest trauma exposure, whose omission reduced I^2 to 0.0%. A pre-specified exclusion sensitivity analysis excluding Smalley et al (2007), which used a broad lifetime ADHD diagnosis, produced a similar estimate (12.2%, 95% CI [1.9, 28.7]). The stability of the magnitude across both analyses (10.9% v 12.2%) suggests that Smalley et al. (2007) was not distorting the prevalence estimate, though the reduction to two studies renders the sensitivity estimate too imprecise to be independently useful. All three studies were rated as high quality on the CCAT. Figure 2. *Forest plot of the pooled prevalence of PTSD within ADHD samples*



Direction B — ADHD within PTSD samples

The second pool constituted studies reporting ADHD prevalence among children and adolescents with a primary PTSD diagnosis (Dixon et al., 2005; Famularo et al., 1996; Ünver & Karakaya, 2019), reporting 36 cases of ADHD across 146 participants with PTSD. Pooled prevalence was 24.5% (95% CI [14.5, 36.0]); study-level estimates ranged from 16.2% (Dixon et al., 2005) to 36.6% (Famularo et al., 1996). Heterogeneity was moderate (I^2 = 55.0%, 95% CI [0.0, 87.1]; τ^2 = 0.007; $Q(2)$ = 4.44, p = .109) and, as in Direction A, is interpreted cautiously. Leave-one-out analysis showed the pooled estimate to be stable (range 19.9% to 28.3% with any single study omitted), with the heterogeneity attributable principally to the study by Famularo et al. (1996), whose sample comprised entirely mistreated participants, and whose omission reduced I^2 to 0.0%. All three contributing samples were drawn from clinically referred populations with likely trauma exposure (psychiatric, maltreatment, and youth justice settings); the pooled estimate should be understood as the prevalence of ADHD within help-seeking or high-adversity PTSD populations, rather than a community estimate. In terms of quality, Dixon et al. (2005) achieved a high rating; Famularo et al. (1996) and Ünver & Karakaya (2019) were rated as moderate.

Figure 3. Forest plot of the pooled prevalence of ADHD within PTSD samples (Direction B)



The pooled prevalence of ADHD within PTSD samples (24.5%) was over twice that of PTSD within ADHD samples (10.9%). This asymmetry may arise from the differing source populations: Direction B samples were uniformly clinical and trauma-experienced; Direction A samples were identified by ADHD diagnosis alone. These same population differences, however, caution against reading the contrast as evidence of a true directional difference in association.

Nature of Co-occurring ADHD and PTSD

A key finding is the difference in results by methods of PTSD ascertainment: interview versus records-based. Among records-based studies, comorbid PTSD-in-ADHD prevalence ranged from 2.23% (Seo et al., 2022) to 4.25% (Baweja et al., 2026). Interview-based studies ranged from 6% (Ford et al., 2000) to 20% (Smith et al., 2026). These two ranges did not overlap: even the highest records-based estimate (4.25%) fell below the lowest interview-based estimate (6%), suggesting ascertainment method may substantially affect detected prevalence, independent of the underlying rate. Prevalence was also high in interview-based studies in the ADHD-in-PTSD direction (Famularo et al, 1996: 37%; Ünver & Karakaya, 2019: 22.1%), though the absence of records-based studies in this direction prevents comparison.

The clustering of records-based studies at the lower end of the observed prevalence range matches Christoffersen and Thorup's (2024) concern that 'PTSD diagnoses in administrative records based on hospital wards underestimated the prevalence of PTSD in adolescence'. Records depend on formal diagnosis, and therefore this method necessarily excludes cases treated in primary care, which never presented at all. That the largest, highly rated, register based study reaches this conclusion, and that the records-based studies included here cluster accordingly, provides further, limited, corroboration. Christoffersen and Thorup also note a related selection effect: the same reliance on formal diagnosis may also inflate the *apparent association* between the two conditions, for reasons discussed under Mechanisms below; here, the relevant point is its downward effect on measured *prevalence*.

Sample setting presents a further confound: several interview-based studies selected participants with expected trauma exposure higher than the general populations sampled in the records-based studies. For example, juvenile detention (Dixon et al., 2005); children removed following judicial findings of neglect or abuse (Famularo et al., 1996), refugee children of tortured parents (Daud & Rydelius, 2009; an indirect trauma sample); studies where trauma experience was itself an inclusion criterion (Ünver and Karakaya, 2019); and studies which found 100% trauma exposure (Smith et al., 2026). The elevated PTSD prevalence in these studies may therefore stem from trauma-selective samples, rather than a genuine ADHD-PTSD association, inviting caution when attributing the interview/records-

based gap to ascertainment method alone. Of the studies with trauma exposed samples, N= 2 were rated high quality (Dixon et al., 2005; Smith et al., 2026) and the remaining N=3 were of moderate quality (Famularo et al., 1996; Daud & Rydelius, 2009; Ünver & Karakaya, 2019).

Two highly rated studies permit partial separation of these effects. Smalley et al. (2007), drawn from a whole-population community birth cohort (ie not a clinical or trauma-adjacent sample), still reported a prevalence rate (9.6%) more than double that of the highest records based estimate (Baweja et al.,2026) 4.25%. This suggests a genuine method effect, although the study's broad-lifetime ADHD definition (along with its wide confidence interval) suggests further caution. Another highly rated study, Ford (2000), by contrast, used interviews in a clinical sample, yet only reported 6% comorbidity, closer to records-based prevalence estimates; however, this rests on just three PTSD cases and carries limited weight. Combined, these suggest a genuine, if partial, impact of assessment method in the PTSD-in-ADHD direction; tempered by, though not wholly attributable to, sample setting.

A further caution cuts across all prevalence estimates. As diagnostic criteria for ADHD and PTSD overlap (especially inattention and hyperarousal), a measured 'comorbidity' may only measure shared symptomatology rather than genuine co-occurrence (Ford, 2000; Daud & Rydelius; 2009, Famularo et al., 1996). This qualifies all reported figures equally: they may represent upper bounds on the true prevalence of co-occurrence, rather than the co-occurrence rate itself.

Finally, extracted data demonstrates issues of precision with small sample sizes and wider confidence intervals. Mpondo et al. (2026) (n=3), Ford (n=3) and Ünver and Karakaya (2019) (n=15) rest on small sample sizes, lending fragility to the prevalence estimates. Similarly, Smalley et al.'s (2007) estimate rests on just 18 PTSD cases out of 188 participants, and the wide confidence interval around its reported association (OR 22.59, 95% CI 2.9-173.7) signals limitation in the underlying data. Baweja et al's (2026) vast sample (N = 714,129) would skew any attempt to pool it with the others. A separate concern is data consistency: Mpondo lists, at various points, different denominators (101 v 111), requiring caution.

Mechanisms of ADHD and PTSD in Young People

A synthesis of the mechanisms underlying the ADHD-PTSD association is even more constrained. The studies included in this review establish the fact of ADHD-PTSD co-occurrence. Several mechanisms are proposed: that ADHD may increase trauma exposure risk (Smalley et al., 2007 and Christoffersen and Thorup, 2024); that shared genetic or environmental liability elevates risk of both conditions (Smalley et al., 2007), or that measured comorbidity may in part reflect criterion overlap, and therefore double-counting (Ford et al., 2000; Daud and Rydelius., 2009; Famularo et al., 1996). These are neither mutually exclusive nor exhaustive, and the largely cross-sectional studies considered here cannot settle the question of direction or causation.

Ford et al. (2000) reanalysed their data after removing hyperarousal items shared between PTSD and ADHD (concentration difficulties) or ODD (anger), finding that PTSD-specific hyperarousal remained elevated in the comorbid and ODD-only groups, but the ADHD-only group no longer differed from the control group. The authors concluded that the ADHD-PTSD symptom association was substantially attributable to overlapping, rather than distinct, symptomatology. Christoffersen and Thorup (2024), in a Danish nationwide register study, explicitly invoked Berkson's bias to caveat their own findings: children already in psychiatric contact for ADHD have more opportunities for a comorbid PTSD diagnosis to be identified and recorded than children without such contact, which the authors themselves acknowledge likely inflates the observed ADHD-PTSD association (adjusted OR 10.7) independent of any true difference in underlying risk.

Baweja et al. (2026) add a distinct variant of this pathway, from the opposite direction: rather than PTSD symptoms being misattributed to ADHD, they describe the reverse. Young people in maltreatment investigations or foster care may display such environmental instability and chronic stress that resulting attention difficulties are misinterpreted as ADHD, when they in fact reflect the child's circumstances rather than a distinct neurodevelopmental disorder. Taken together with Ford et al.'s (2000) and Christoffersen and Thorup's (2024) findings, this suggests the symptom-overlap pathway may distort diagnosis in either direction, depending on which condition is assessed first and in what context.

Daud and Rydelius (2009) propose a related but conceptually distinct account: rather than diagnostic overlap or overshadowing, they suggest a shared physiological process: anxiety driven muscular tension and cognitive strain. This, they suggest, produces restlessness and inattention that is interpreted as ADHD in one framing and as PTSD-related hyperarousal in another. This differs from Ford et al.'s (2000) and Christoffersen and Thorup's (2024) accounts in requiring no diagnostic or detection error, but instead proposing a common physiological substrate genuinely producing the same clinical presentation. Daud and Rydelius (2009) are themselves unable to adjudicate between this account and two further possibilities they raise: that trauma-related family stress impairs cognitive development directly, or that children with pre-existing cognitive vulnerability cope less well with a parent's trauma symptoms. Their inability to distinguish between these explanations illustrates, again, that multiple mechanisms may underpin the comorbidity this review examines.

Support for the exposure pathway is more mixed than for symptom overlap. Dixon et al. (2005) found that, of all comorbid diagnoses examined, only ADHD and separation anxiety were more likely to occur before PTSD onset, providing some support for this mechanism. However, this pattern held for only a minority of cases: 73% of instances showed ADHD arising concurrently with or after PTSD, not before it. Ford et al. (2000) provide more direct support for a dose-response account: within their ADHD group, maltreatment trauma explained additional variance in PTSD symptoms beyond gender and general psychopathology ($\Delta R^2 = .04$, $p < .001$). Christoffersen and Thorup (2024) offer a related but distinct account, proposing that ADHD increases trauma exposure indirectly, through social misunderstandings, peer rejection, punishment, and family conflict arising from the child's neurodevelopmental profile: a psychosocially-mediated pathway, as opposed to the more symptom-focused mechanisms described by Ford et al. (2000) or Ünver and Karakaya (2019).

Smith et al.’s (2026) findings complicate this picture: PTSD was not correlated with ADHD inattentive symptoms, and its correlation with hyperactive/impulsive symptoms was small, and negative. ($r = -.20$, $p < .05$). This should be considered in the context of a small (n=50), single site, likely underpowered sample. The wider literature is similarly divided: Wozniak et al. (1999), in a large longitudinal sample, found ADHD did not significantly predict trauma exposure or PTSD, with childhood mania the stronger risk factor; consistent with Smith et al.'s

finding. Biederman et al. (2013), by contrast, found PTSD onset (mean age 12.6 years) reliably followed ADHD onset in a large clinical sample, suggestive of an exposure-amplification mechanism. Overall, the findings from this review align with wider literature in observing this mechanistic pathway to be contested. Importantly, Christoffersen and Thorup (2024) is unusual in offering support for both pathways simultaneously: an exposure account, via the social-conflict mechanism described above, and a symptom-overlap account, via the Berkson's bias argument discussed above.

Discussion

Prevalence of Co-morbid ADHD and PTSD in Young People

To this author's knowledge, this review provides the first pooled prevalence estimates of co-occurring ADHD and PTSD in childhood and adolescence (≤18). Pooled PTSD prevalence within young people with ADHD was 10.9% (95% CI: 5.1-18.4), and pooled ADHD prevalence in young people with PTSD was 24.5% (95% CI: 14.5-36). Both exceed general-population base rates for either disorder alone in this age group: ADHD, ~8% (Ayano et al., 2023); PTSD 3-5% (Kessler et al., 2017; Levin & Liu, 2024). This suggests co-occurrence is unlikely to reflect mere coincidence, and that an ADHD diagnosis, even without additional trauma history, may be associated with markedly elevated risk of PTSD in children and adolescents. These estimates should nonetheless be interpreted cautiously, given the small number of pooled studies, the heterogeneity across estimates, and, particularly for Direction B, the high adversity/clinical nature of the contributing samples.

Heterogeneity was moderate in both pools but, in each case, traced principally to a single study characterised by unusually high trauma exposure - Smith et al. (2026) in the PTSD-in-ADHD pool and the maltreatment-referred Famularo et al. (1996) in the ADHD-in-PTSD pool - whose omission reduced I^2 to zero in both (see Results). That the same pattern recurs across both directions may suggest between-study variation is driven less by ascertainment method or chance than by differences in the trauma severity of the underlying samples. Both pooled estimates were otherwise reasonably stable under leave-one-out analysis, and a sensitivity analysis excluding Smalley et al. (2007) from Direction A left the estimate largely unchanged; the wide confidence intervals around both I^2 values nonetheless reflect the imprecision inherent to three-study pools and caution against over-interpreting either the estimates or their heterogeneity.

The over two-fold higher prevalence of ADHD within PTSD samples than of PTSD within ADHD samples should likewise be interpreted cautiously. Any asymmetry observed by this review is unlikely to reflect a true directional difference; it more plausibly stems from the contrasting source populations: the PTSD-in-ADHD pool characterised by ADHD ascertainment, the

ADHD-in-PTSD pool by already trauma-exposed populations (psychiatric outpatients, maltreated and court-removed children, incarcerated adolescents). This explanation is strengthened by the lack of concordance among the three ADHD-in-PTSD studies. Famularo et al. (1996) found a significant ADHD-PTSD association (37% vs. 17%, p = .024). Dixon et al. (2005) found no significant difference (16.2% vs. 11.1%) in a sample where a probable conduct-disorder ceiling effect may have masked group differences. Ünver and Karakaya (2019) specifically reported no significant difference, but their percentages (22.1% ADHD-in-PTSD, 59.5% ADHD-in-OCD) point the opposite way, with a markedly higher rate in the comparison group. In any event, their comparison group was a different clinical population (OCD) rather than PTSD-negative controls, limiting comparability. This disagreement between studies drawn from superficially similar high-risk populations provides stronger justification for this review's dual-direction pooling structure than a population-level explanation alone.

Mechanisms of ADHD and PTSD in Young People

Mechanistic evidence in this review is perhaps best considered as belonging to two distinct pathways underpinning co-occurring ADHD and PTSD: environmental exposure and symptom overlap. This framing is consistent with the developmental psychopathology principle of equifinality: a single outcome may be reached via multiple distinct routes (Cicchetti & Rogosch, 1996). Across studies, the strongest support was for the overlap in symptom profiles between PTSD and ADHD that could explain the mechanisms. Three studies suggested that apparent comorbidity may partly be an artefact of overlapping diagnostic criteria, ascertainment bias, or diagnostic overshadowing, while one study proposed a shared physiological process producing similar behavioural presentations. Although conceptually different, these explanations converge on the conclusion that observed comorbidity may not always represent two distinct disorders occurring simultaneously.

The strongest evidence in this review supports symptom overlap as an underpinning mechanism, though two distinct mechanisms sit within this pathway. Ford et al. (2000), Christoffersen and Thorup (2024), and Baweja et al. (2026) each point to a measurement or detection problem: overlapping diagnostic criteria, closer clinical scrutiny of already diagnosed children, or environmentally-driven behaviour being misread as a distinct disorder.

Daud and Rydelius (2009), by contrast, propose a genuine shared physiological substrate: anxiety-driven arousal and cognitive strain producing the same surface presentation under both diagnostic labels, with no detection error involved. Both accounts predict the same observable pattern of elevated apparent comorbidity, but carry different implications. The detection account suggests better-targeted assessment could resolve much of the apparent overlap, while the shared-substrate approach suggests the overlap is genuine and would persist however carefully cases are assessed. This review's findings cannot arbitrate between the two, and so both are presented here as components of a single symptom-overlap pathway; notably, Daud and Rydelius (2009) likewise decline to choose between their own competing explanations.

Shared genetic liability underpinning both conditions is a third possible mechanism, though outside what this review can directly evaluate, as none of the eleven included studies employed a genetically-informed design (twin, family, or genome-wide association study) capable of testing it. This is therefore better understood as an acknowledged gap in the evidence base than a pathway this review can assess, and is discussed here in relation to the equifinality framework adopted by this review. External evidence, such as Dinkler et al.'s (2017) twin research, offers indirect support for a shared-liability account, and also qualifies the exposure account offered above: ADHD does not straightforwardly increase trauma exposure through impulsivity and risk-taking alone. Instead, ADHD-linked traits may evoke the adverse environments in which trauma occurs: a gene-environment correlation rather than a purely causal chain. This evidence concerns neurodevelopmental disorders and maltreatment broadly, rather than the ADHD-PTSD relationship specifically; genetically-informed designs directly testing that relationship represent a clear priority for future research in this age group.

Where the co-occurrence is genuine rather than artefactual, the Double Jeopardy Model (Gajwani & Minnis, 2023) offers a further interpretive frame. It posits that when two independent risk factors - here neurodivergence and childhood maltreatment - coexist, their combined effect on adverse outcomes exceeds that of either factor alone. Each disorder independently elevates risk for psychiatric comorbidity and functional impairment (Spencer et al., 2016; APA, 2022); in combination, individuals may face a compounding interaction, in

which ADHD-related impulsivity and risk-taking behaviours increase trauma exposure and thus the PTSD risk, while PTSD-related hyperarousal and attention impairment may in turn exacerbate untreated ADHD symptoms (Boodoo et al., 2022). This could help explain both the heightened comorbidity and the disproportionately severe clinical and functional impact reported in affected individuals; the latter drawing on the wider literature as the present review did not assess functional outcomes.

This genetically-informed account interacts with the Double Jeopardy Model. Where that model frames ADHD and trauma exposure as compounding environmental risks, the co-twin evidence suggests that shared genetic liability may itself explain part of the association between neurodevelopmental vulnerability and adverse childhood experience. These accounts are not mutually exclusive; developmental psychopathology's principles of equifinality and multifinality (Cicchetti & Rogosch, 1996) offer a useful framework for understanding non-linear developmental pathways to psychopathology. Equifinality suggests that co-occurring ADHD and PTSD in childhood may be reached via multiple distinct routes: an environmental exposure pathway, in which ADHD-related impulsivity increases trauma exposure (Spencer et al., 2016); a symptom-overlap pathway, in which shared or conflated symptoms inflate apparent comorbidity; and a shared genetic liability pathway, in which common genetic factors elevate risk for both neurodevelopmental and trauma-related vulnerability (Dinkler et al., 2017; Kremen et al., 2012; Faraone et al., 2010). Multifinality, in turn, suggests that the same underlying vulnerability does not lead inevitably to comorbid ADHD-PTSD; outcomes vary with other risk and protective processes across development.

Theoretical and Clinical Implications

Theoretically, this review is, to the author's knowledge, the first to apply the equifinality/multifinality framework to ADHD-PTSD comorbidity in young people, building on the finding that no single mechanism underpins this comorbidity. It also revisits the Double Jeopardy Model (Gajwani & Minnis, 2023), which frames ADHD-related impulsivity and PTSD-related hyperarousal as compounding risks.

Ford et al.'s (2000) reanalysis carries a further theoretical implication: if a substantial proportion of observed comorbidity is symptom overlap, this bears directly on how comorbidity should be operationalised in future equifinality-informed research.

Clinically, the findings of this review carry several implications. Baweja et al.'s (2026) finding that youth with comorbid ADHD and PTSD have substantially higher healthcare service contact than those with ADHD alone offers a clear clinical-burden argument for prioritising this comorbidity in service planning. Ford et al.'s (2000) finding that ADHD-only youths' apparent PTSD symptoms were substantially attributable to overlapping items carries a direct assessment implication: clinicians should consider whether elevated hyperarousal or concentration difficulties are genuinely trauma-specific, rather than assuming any elevation confirms comorbid PTSD. Ünver and Karakaya's (2019) own methodological caution is similarly instructive: their PTSD sample was predominantly female and sexual abuse-driven. This composition tends to depress observed ADHD-in-PTSD comorbidity, illustrating how sample characteristics can distort comorbidity estimates independent of true prevalence. These findings support routine bidirectional screening: for trauma history within ADHD assessment, and for neurodevelopmental difficulties within trauma-focused pathways, in keeping with existing NICE guidance for both conditions (NICE, 2018). This is particularly relevant to NHS services, where neurodevelopmental and mental health pathways are often structured independently from one another.

Strengths, Limitations and Directions for Future Research

This review's primary strength is its contribution of prevalence estimates of co-occurring ADHD and PTSD during the developmental period of childhood and adolescence, addressing a gap left by adult-focused literature (Magdi et al., 2025) and lifespan-spanning studies (Spencer et al., 2016). Methodologically, it employed dual-direction pooling, reflecting the two directions of ascertainment present in the underlying studies, and conducted sensitivity analyses for both pools that indicated reasonably stable estimates despite small k. The review also adhered to best practice guidelines to minimise researcher bias: it was registered with

PROSPERO and reported in line with PRISMA. Its findings should nonetheless be interpreted in light of its limitations and the quality of the included studies.

Several limitations merit particular caution. Both pooled directions comprised only three studies, yielding wide confidence intervals and insufficient power for formal moderator analysis by gender, trauma type, or age band. All three Direction B studies were cross-sectional, limiting causal and temporal inference specifically for that direction. Definitional and measurement heterogeneity across included studies was considerable, spanning DSM-IV, DSM-5, and DSM-5-TR criteria and assessment methods ranging from structured clinical interview to administrative diagnostic coding, which motivated the exclusion of purely code-based studies from formal pooling. Two further limitations, discussed above, qualify the pooled estimates themselves: several interview-based samples were drawn from high adversity populations, so their elevated prevalence may result from trauma-selective sampling rather than a genuine ADHD-PTSD association; and diagnostic criterion overlap means a proportion of measured comorbidity may reflect shared symptomatology rather than true co-occurrence. Finally, the requirement that included studies operationalise diagnoses of both conditions, and the exclusion of code-based studies from pooling, reduced the eligible evidence base: specificity and credibility of the pooled estimates prioritised at the expense of breadth.

A further limitation concerns the largely absent reporting of ethnicity across the included studies. Only five of the eleven studies reported participant ethnicity, and those five used inconsistent categories, meaning this review cannot speak to whether ADHD-PTSD comorbidity, or the proposed mechanisms underlying it, operate differently across ethnic groups. This is a significant gap given documented disparities in ADHD diagnosis and treatment access across ethnic groups (Morgan et al., 2013). This raises plausible concern regarding under, or over, representation of specific ethnic groups in the samples included in this review, such as Ford et al. (2000). Combined with potential variability in access to diagnostic assessment, this may itself shape observed comorbidity rates independently of true underlying prevalence. Moreover, the review's international scope introduces variability in healthcare system structure that limits comparability across studies: differences in access to diagnostic assessment, referral thresholds, and the availability of directly accessed versus

administrative code-based diagnosis, may mean that apparent cross-study differences in prevalence may partly reflect system level variation in who gets diagnosed, as opposed to actual differences in underlying comorbidity.

Future research should prioritise larger, adequately powered primary studies in under-18 populations, ideally longitudinal given the cross-sectional predominance of the existing evidence base. Testing the shared-liability pathway will require genetically-informed designs applied specifically to ADHD and PTSD. Studies designed to disentangle genuine comorbidity from symptom-overlap, following Ford et al.'s (2000) item-level approach, represent a particularly promising and currently underused method. Finally, greater standardisation of diagnostic criteria and assessment methods across future studies would improve comparability in this developing evidence base.

Conclusions

Comorbid ADHD and PTSD does not appear to be a rare presentation among children and adolescents with either diagnosis. That being said, the directional pooled estimates reported in this review (10.9% and 24.5%) should be interpreted with caution given the small number of pooled studies, wide confidence intervals, and diagnostic heterogeneity across the underlying evidence base. Part of this elevation may reflect overlapping symptomatology and ascertainment effects rather than wholly genuine co-occurrence, though the present evidence cannot precisely quantify the relative contribution of each. Of the three mechanisms considered, this review lends tentative support to the symptom-overlap pathway (including ascertainment-related detection bias), while the environmental exposure account remains plausible but contested. Further, this review could not directly test shared genetic liability, which remains an important gap rather than a negative finding. Given the current evidence base, findings should be treated as indicative rather than definitive; nonetheless, the clinical implication is that practice may benefit from routine bidirectional screening, consistent with NICE guidance. Future research should prioritise adequately powered, longitudinal, and mechanism-testing designs in this specific age group.

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Chapter 2: Major Research Project

A system not built for BPD - Practitioner Perspectives on Identifying and Treating Borderline Personality in Young People

Prepared in accordance with the author requirements for Borderline Personality Disorder and Emotion Dysregulation (https://link.springer.com/journal/40479/submission-guidelines)

Plain Language Summary

Title: A system not built for BPD[1] - Practitioner Perspectives on Identifying and Treating Borderline Personality in Young People

Background

Borderline personality disorder (BPD) is a mental health condition that affects how a person feels about themselves and others, which can cause difficulties in their emotions, relationships and daily life. It negatively affects health, education, and employment. Although research shows BPD is not uncommon, especially in teenagers and young adults known to mental health services, many wait a long time to be identified or are never diagnosed with BPD at all. This means they may not get the treatment they need when they need it, impacting their long-term health and social outcomes.

Aims

This study aimed to understand the experiences and views of staff working with young people with BPD features – to explore their views on what helps and hinders identifying and supporting young people with BPD.

Research questions

1. What barriers and facilitators do professionals perceive in the identification and treatment of young people presenting with BPD features in services (NHS and non-NHS)?
2. How do professionals recognise, assess and conceptualise BPD features in young people?
3. What factors influence professionals' decision-making regarding identification and treatment of BPD features in young people?

[1] The terms 'Borderline Personality Disorder', 'BPD', 'EUPD' and 'BPD features' were used with participants to capture young people presenting with complex needs characteristic of BPD, whether or not formally diagnosed. For consistency, 'BPD' is used hereafter to refer to this group.

Methods

Twelve professionals from NHS and third sector services supporting young people's mental health completed a semi-structured interview - to understand their views on what helps and hinders recognition and treatment of BPD features. Interviews were recorded, transcribed, and analysed using Reflexive Thematic Analysis to understand common themes.

Findings

Participants described the BPD diagnostic process as long and complicated. In their view, it could be a difficult decision whether BPD was the right diagnosis for a young person who was experiencing several difficulties simultaneously. Mental health services designed to support young people were fragmented and it was felt difficult for young people to consistently get the support required for their BPD features.

Conclusions

The findings support the need for clear service-level guidance on identifying and supporting young people with BPD features. More training and support for staff is needed in community services, including specialist services. The transition from children to adult mental health services needs to work better. All professionals would benefit from training and support that builds their confidence, tackles stigma, and helps them recognise BPD features in and amongst other co-existing conditions.

Abstract

Background: Borderline personality disorder (BPD) is characterised by a pervasive pattern of difficulties across the domains of interpersonal relationships, affect regulation, impulsivity and self-image, and is associated with significant adverse outcomes. Despite prevalence estimates in young people ranging from 1–3% in the community to 33–49% in inpatient settings, identification remains inconsistent. Operating within a feasibility randomised controlled trial with young people (The BRIDGE project), this study explored attitudes and experiences of practitioners working in community services supporting young people's mental health.

Methods: Semi-structured interviews were conducted with twelve multidisciplinary practitioners from NHS and third sector services working with young people with complex unmet needs. These were analysed with Reflexive Thematic Analysis.

Results: Three major themes with eleven subthemes were identified: (1) navigating diagnostic reticence; (2) a system not built for BPD and (3) diagnostic controversy: divided perspectives on labelling young people.

Conclusions: Findings illustrate a complex system where professional reticence, service fragmentation, and inadequate professional support converge to produce and sustain avoidance of BPD diagnosis in young people. This risks missing opportunities for timely intervention at a critical developmental stage. Findings have direct implications for policy, service design, and workforce development, demonstrating an urgent need for co-produced, evidence-based guidance on identifying BPD in young people and investment in community services.

Keywords: Borderline personality disorder; Young people; Adolescents; Diagnosis; Practitioner perspectives; Qualitative research; Reflexive thematic analysis; Child and adolescent mental health services.

Introduction

Borderline Personality Disorder (BPD) is characterised by a pervasive pattern of difficulties across interpersonal relationships, affect regulation, impulsivity and self-image (APA, 2013). Untreated BPD is associated with adverse social and health outcomes, including life expectancy reduction of almost two decades (Fok et al., 2012), increased incidence of suicidality and self-harm (Zanarini et al., 2008; Stefanatou et al., 2022), poor physical health (El-Gabalawy et al., 2010), lower academic attainment and disproportionally high unemployment (Chanen, 2015), high family and carer burden (Bailey & Grenyer, 2013) and persistent functional disability (Gunderson et al., 2011). A high economic cost is associated with BPD (Botham et al, 2021): a 15-fold increase in disability pensions (Hastrup et al., 2019) and expensive treatment costs (Brettschneider et al., 2014). Its recognition and treatment are an urgent priority.

Prevalence estimates of BPD in young people in the community lie between 1-3%, increasing to 11-22% in outpatient services and 33-49% in inpatient settings (Chanen et al, 2017; Guilé et al., 2018). BPD peaks in adolescence and early adulthood; yet despite evidence that it can be readily identified in adolescence and that early intervention may improve outcomes, diagnosis in young people remains controversial and frequently delayed (Laurenssen et al., 2013; Sharp, 2017; Hartley et al, 2022, Chanen et al., 2022).

Stigma in BPD is multifaceted: clinical reticence to diagnose, or to provide information, reinforces a sense of hopelessness and permanency (Stiles et al., 2023). Beyond clinician attitudes, stigma in BPD operates at a structural level - embedded within organisational cultures, institutional policies, and service norms, shaping care pathways and service delivery (Klein et al., 2022). Systemic stigma is a significant, underacknowledged barrier to equitable care.

BPD's complexity, and the 'waxing and waning' of its symptoms across the lifespan present significant challenges to assessment. High rates of comorbidity and symptom overlap with anxiety, depressive, and psychotic disorders make comprehensive psychiatric assessment essential for accurate diagnosis and treatment planning (Chanen et al., 2017). Failure to

adequately assess these overlapping presentations may contribute to diagnostic uncertainty and fragmented care pathways. The varying treatment requirements of BPD necessitate differentiated assessment and intervention; the first challenge is developing assessments enabling early and appropriate detection (Hutsebaut et al, 2019).

Identification difficulties are compounded by limited clinician training in the assessment and treatment of personality pathology in young people. This is perpetuated by misassumptions: that BPD features are normative, transient aspects of unstable or developing personalities, attributable to comorbid Axis 1 disorders (Sharp, 2017). This increases the risk of inappropriate treatment, polypharmacy and iatrogenic harm perpetuated through cycles of crisis-driven care-seeking and care-giving (Biskin, 2015). Nevertheless, there is a continued reluctance to apply treatment guidelines and diagnose BPD in adolescents (Chanen et al, 2022; Hutsebaut, 2021; Sharp, 2017). Perception of BPD as untreatable, combined with negative encounters of help-seeking, reinforces this bias. This frequently results in diagnostic avoidance, delayed access to effective treatments and poorly supported transitions from CAMHS to AMHS (Singh et al., 2023).

Research has increasingly focused on developmental pathways to BPD. Young people with BPD frequently present with complex emotional needs (Botham et al., 2021) and elevated rates of neurodevelopmental conditions (Gajwani & Minnis, 2023). There is growing recognition that neurodevelopmental differences often co-occur with adverse childhood experiences (ACEs), the interaction creating a "double jeopardy" that increases vulnerability to poor outcomes (Zarei et al., 2021; Gajwani & Minnis, 2023). This may increase risk for BPD (Dinkler et al., 2017; Gajwani et al., 2021 and 2022).

Current thresholds for access to CAMHS services are high. Often, only young people with the most complex psychiatric presentations and greatest risk of suicidality are referred (Lewis et al., 2019; Lu et al., 2018). Presentation to services occurs at later stages, where the burden and impact of disease is far greater (Minnis et al., 2022). Opportunities for early identification and intervention are missed, and costlier, less effective specialist intervention becomes necessary.

Randomised controlled trials provide modest evidence for long-term effectiveness of specialised psychotherapies in adults (Cristea et al., 2017) and young people with BPD (Chanen et al., 2020). However, these have not demonstrated consistent superiority over well-structured general clinical care (Jørgensen et al., 2021), with small and unstable effect sizes (Cristea et al., 2017). Intensive training requirements, treatment complexity, and associated costs present substantial barriers to widespread implementation. The therapeutic relationship is foundational in evidence-based BPD treatment frameworks (Linehan, 1993; Bateman & Fonagy, 2006). It is often the primary driver of change, placing the relational alliance at the heart of the work. Effective care may depend not only on specialised techniques but on practitioners' capacity to establish consistent, validating, and collaborative relationships, highlighting the value of scalable relational approaches.

Challenges in identification and treatment are further compounded by discontinuities in service provision. The TRACK study identified children and young people with emotional or neurodevelopmental disorders as those most likely to have poorly managed or failed transitions from CAMHS to AMHS (Islam et al., 2016). Although NICE (2016) and the Department of Health (2015) both identify the need to improve this transition, focussed literature remains scarce. Relatively little is known about how practitioners working in health and social care settings recognise, conceptualise and respond to BPD features in young people. Understanding this is essential to improve pathways to care and reduce delays in diagnosis and access to effective intervention.

Aims and Research Questions

This study aims to explore professionals' views and experiences of identifying and responding to BPD features in young people aged 14–25 years across community and specialist services (NHS and non-NHS).

Primary research question:

RQ 1. What barriers and facilitators do professionals perceive in the identification and treatment of young people presenting with BPD features in services (NHS and non-NHS)?

Secondary Research Questions:

RQ 2. How do professionals recognise, assess and conceptualise BPD features in young people?

RQ 3. What factors influence professionals' decision-making regarding identification and treatment of BPD features in young people?

Methods

The BRIDGE project

This study was conducted in the context of the BRIDGE project (ClinicalTrials.gov Identifier: NCT05023447), a feasibility randomised controlled trial (fRCT), evaluating Cognitive Analytic Therapy (CAT) for 14- to 24-year-olds showing sub-threshold or full-threshold features of BPD. Participants completed a two-stage screening before baseline assessment and randomisation to one of two arms: BRIDGE plus Service as Usual (SAU), or SAU (Gajwani et al., 2024). The BRIDGE arm involved a comprehensive assessment, joint formulation, and up to 16 CAT sessions (Ryle, 1997).

Ethics

This study was granted ethical approval (North of Scotland Research Ethics Committee) REC Reference 21/NW/0209 as a substantial amendment to the BRIDGE Project IRAS Project ID 299825: Appendix 2.3.

Design and Procedure

This study adopted a qualitative approach using Reflexive Thematic Analysis (RTA) (Braun & Clarke, 2006). A topic guide (Appendix 2.4) was designed in collaboration with the PI of the BRIDGE Project and a lived experience researcher. Resources prohibited pilot testing. The topic guide flexibly informed semi-structured interviews focussing on participants' experiences of identifying, assessing and supporting young people with BPD features. Interviews were conducted via MS Teams with practitioners from NHS and non-NHS services working with young people with complex needs. Participants were recruited through purposive sampling with a snowball approach (Naderifar et al., 2017). As BPD and its features are poorly recognised, these were described for participants using the nine DSM-5 domains (First et al., 2015). Interviews lasted between 30 to 60 minutes. These were recorded and transcribed using MS Teams; initial transcripts were checked for accuracy, corrected where necessary, and anonymised. Recordings were destroyed post-transcription.

Participant recruitment

Stakeholders from specialist and community services caring for young people with BPD features were recruited in a Scottish urban health and social care setting. Stakeholders involved in the wider BRIDGE Project were identified as potential participants because they delivered services accessed by young people with BPD features.

The researcher emailed potential participants a letter of invitation (Appendix 2.5) and participant information sheet (Appendix 2.6). They were also invited to share the study with colleagues who might be interested. Participants were given a minimum of 24 hours to consider their participation. A date and time were agreed via email with those opting in. Participants were offered interviews in person or via MS Teams; all opted for MS Teams. The researcher sent an MS Teams link with a consent form (Appendix 2.7); all participants returned an electronically signed form before interview. Fourteen practitioners expressed interest. Twelve provided informed consent and participated; one did not respond to follow-up contact and one did not attend their interview.

Participants

Twelve participants were recruited, in line with Braun & Clarke's (2019;2021) recommendations for thematic analysis. The sample consisted of multi-disciplinary practitioners. Most were NHS practitioners, aside from one Mental Health Researcher with lived experience, and one counsellor who worked both privately and in the charity sector. Of the ten NHS practitioners, one was an academic and practising GP; the others included a community links worker, a complex trauma link nurse, and a medical psychotherapist. The remaining six were clinical psychologists: four consultants, one trainee, and one principal. Further individual-level demographic information (e.g., age, ethnicity, years of experience) was not collected, in order to protect participant confidentiality and anonymity. As several participants worked within small, specialist teams or held roles represented by only one or two individuals within the sample, it was felt that reporting more granular demographic detail, could have rendered specific participants vulnerable to jigsaw or other identification.

Data Analysis

Data analysis was informed by Braun and Clarke's (2006) six-phase framework. Transcripts were read and re-read by the researcher, with initial observations and ideas noted throughout. Interesting features across the dataset were then coded systematically using NVivo, with data relevant to each code collated for further analysis. Coding was conducted inductively, without attempting to fit the data to any pre-existing theoretical framework. Codes were subsequently organised into provisional themes and reviewed for coherence in relation to the broader dataset. Analysis evolved throughout the project's write-up process, with themes refined iteratively to produce clear definitions and titles. Transcripts, coding, and candidate themes were reviewed in supervision, where discussion of the connections between themes informed their final structure.

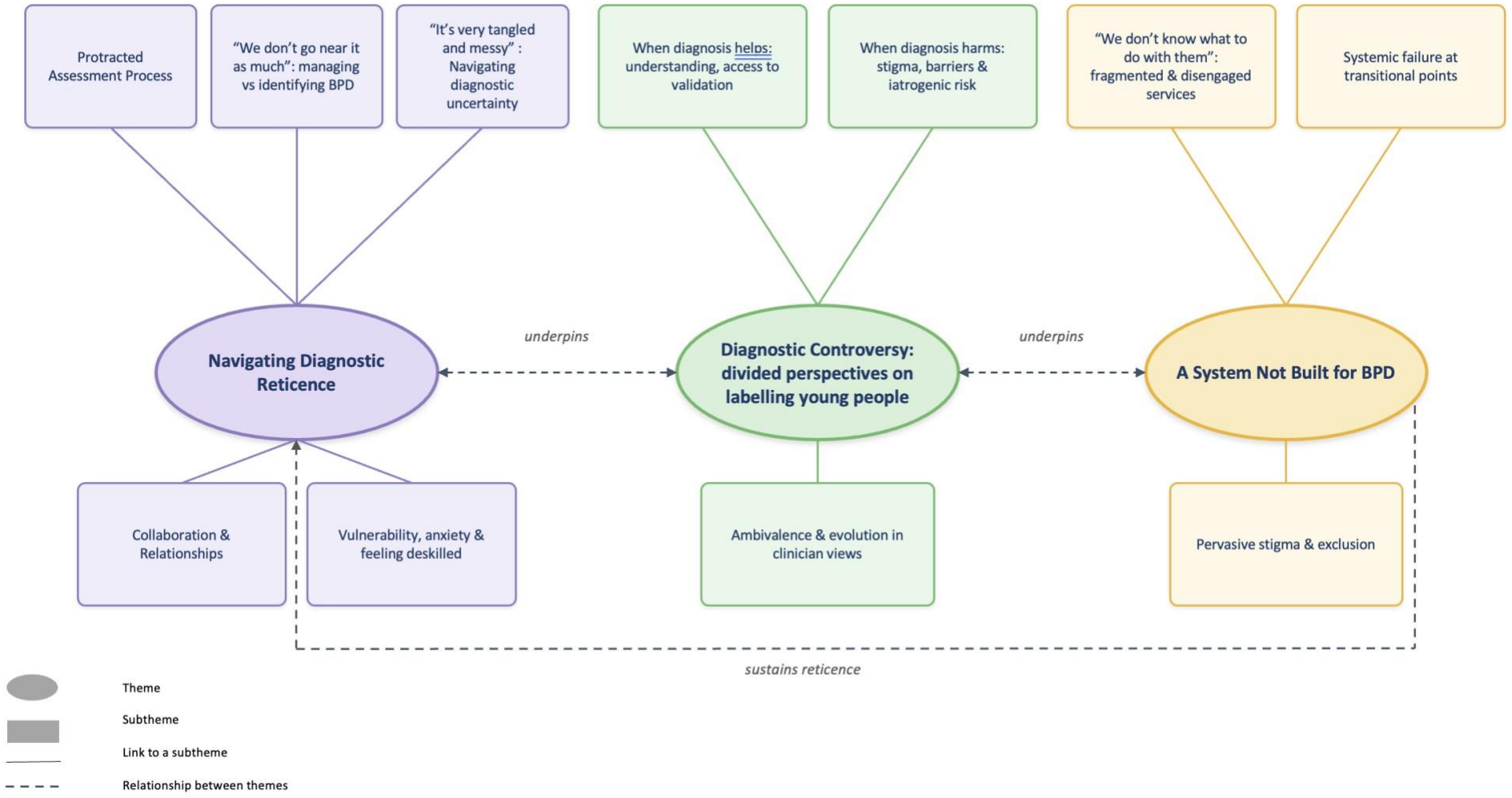
Researcher Reflexivity

See Appendix 2.8.

Epistemological Perspective

This study was conducted from a critical realist position (Olsen, 2007), recognising both the objective and subjective dimensions of participants' accounts. This stance acknowledges real, sometimes hidden, structures. These include, for example, NHS service configuration, diagnostic frameworks, and professional stigma, that shape how practitioners identify and respond to BPD in young people, whilst also considering participants' individual roles and professional contexts. By exploring how these structural and contextual factors may influence practitioner perspectives, critical realism enables a nuanced interpretation of individual accounts and provides a framework for understanding how identification and treatment pathways for BPD might be improved, consistent with the semantic-to-latent coding approach taken in analysis, where surface-level descriptions were interpreted for the underlying systemic mechanisms they suggested. This position also aligns with the study's aim of identifying transferable patterns across a professionally diverse sample, rather than producing an exhaustive account of any single participant's subjective experience.

Figure 1: Thematic Diagram



Results

Reflexive thematic analysis identified three themes with eleven subthemes: '*Navigating diagnostic reticence*', '*A system not built for BPD'* and '*Diagnostic controversy: divided perspectives on labelling young people*' (see Figure 1 above). These illustrate the challenges participants faced in assessing and diagnosing BPD within a fragmented system.

1. Navigating diagnostic reticence

This captures participants' experiences of the assessment process and their uncertainties in understanding BPD. It illustrates the complexity created by the comorbidities with which young people with BPD present, and the difficulty participants described in disentangling these.

1.1. Protracted Assessment Process

Participants described lengthy assessment processes involving multiple appointments, predominantly using clinical interviews. The assessment process was likened to that of a neurodevelopmental condition: "looking for patterns over time" (Rachel).

Although participants reported approaching BPD no differently to other diagnostic assessments, they described extensive assessments:

> *"[…] in regards to giving the formal diagnosis […] I'm 100 times more thorough with an EUPD diagnosis. But in regards to assessing features, no, it's not a different approach. It's the same as it always is." Helen*

Several participants reported encountering young people with a BPD diagnosis infrequently; such assessments were not 'routine' in their services:

> *"When I did that one EUPD diagnosis, we did so many assessments. Because I needed to make sure that nobody was going to come back at me and go […] This person's actually just got an attachment problem. How dare you?!' […] I know how upset it makes specifically psychologists." Helen*

This highlights practitioners' concerns about the consequences of diagnosis, demonstrating potential upset and underlying stigma. Some participants avoided formal diagnosis despite this falling within their professional role, suggesting instead that psychiatry colleagues "would do that diagnostic assessment" (Jordan).

This suggests a dichotomous view - formulation as psychological practice and diagnosis as medical.

1.2. "It's very tangled and messy" Navigating Diagnostic Uncertainty

Participants described challenges in assessing and diagnosing BPD, with *"lots of differentials to be considered",* particularly in the context of trauma and/or neurodiversity. Although many recognised that BPD is not an exclusionary diagnosis, the overlap between features of BPD and cPTSD was highlighted as particularly difficult to "tease out". Experienced practitioners found this "really, really hard to separate more and more over time". Many observed an increase in comorbid neurodiversity over the course of their careers, attributable to increased awareness of ASD and ADHD and resulting in a "confused picture" diagnostically.

Participants also described uncertainty about when it is developmentally appropriate to understand young people's presenting difficulties as features of BPD:

> *"With the age of the young people that we that we work with, when does it become pervasive enough to think about it as a personality difficulty […] when is it out of the normal for what a teenager would be doing?" Helen*

Disentangling BPD from comorbidities was challenging even within specialist services, a difficulty not reflective of individual competence.

> *"I feel challenged everyday, it's still quite a complicated area, partly because of […]overlapping diagnoses […] being more aware of things like neurodevelopmental disorders as well kind of overlapping sometimes and making quite a confused picture" Jean*

1.3. Vulnerability, anxiety and feeling deskilled

Participants were candid about feeling deskilled and doubting their understanding of the diagnosis. This reflected the relational complexity at the core of BPD, rather than any competency deficit, which appeared inherent to working with this population. Practitioners also described the non-linear progress of therapeutic work with BPD and parallel fluctuations in their self-efficacy. Despite occasional discomfort, they remained able to draw on the evidence base, even in challenging moments.

> *"I feel really like deskilled in the moment, like I don't really understand what BPD is, but then […] the model is working quite well and patients are really into it […]this has like good use and feels helpful, but I really do oscillate between them to be honest." Erin*

Practitioners across all services, at all levels of seniority and experience, reported similar experiences, with the stigma attached to BPD diagnosis a key contributor. One specialist practitioner explained *"staff have always struggled with the emotional impact working with BPD and how to respond to it"*. These feelings, combined with perceptions of the diagnosis, were seen as central to navigating this work.

> *"It still puts a lot of anxiety in people […] there's a lot of difficult feelings for professionals about how we work with it and where it sits […] it is more about*

how it's been understood and what it makes people feel than the actual diagnosis itself" Helen

The impact of these feelings could be framed as iatrogenic risk. One participant reflected "*often the questions don't get asked and the curiosity isn't there to […] formulate things in terms of BPD"* , which they linked to practitioner confidence.

1.4. "We don't go near it as much" managing versus working with BPD

Participants described infrequently encountering young people with BPD within services. Instead, they described treating symptoms, or clusters of difficulties, which, though not identified as such, could be understood as the complex needs characteristic of BPD. These difficulties tended to be formulated within a trauma framework, which appeared more acceptable to practitioners:

"I don't know really know as much about what's happening in the world of […] BPD diagnosis […]for our young people we are kind of obviously much more focused on the kind of complex trauma history" Helen

Participants described variable understanding of difficulties between practitioners working in CAMHS and AMHS, delaying or avoiding BPD diagnosis in children's services while acknowledging these young people were then diagnosed in AMHS. Further, some participants described a lack of knowledge about the diagnosis, confessing they were *"unsure how the diagnostic process would work in young people*" or "what presentations might look like". Limited awareness of how BPD presents may also mean that young people accessing services never have these features identified. Participants in community settings effectively described managing BPD, while not considering identification of BPD features as part of their role:

"[…]we help manage people with borderline personality disorder. But in terms of diagnosing and identifying people with that, we don't really tend to get involved in that [...] I don't know if that's something we should be doing" George

1.5. Collaboration and Relationships

Collaboration with colleagues and young people, and strong professional and therapeutic relationships, was viewed as integral to working with young people with BPD. Participants described multidisciplinary discussions as containing and bolstering a sense of psychological safety in identifying and treating BPD:

"There's something about working together that I find really containing for the clinician and therefore the patient. And I think it helps to also reduce some of the over attachment that happens for patients with BPD and clinicians." Erin

Practitioners also described collaborating with the young person to build a shared understanding of their difficulties, recognising that *"they're the experts on them"* and the importance of openness and transparency in therapeutic relationships and diagnostic discussions.

Many participants acknowledged that the characteristic features of BPD (including emotional dysregulation, fear of abandonment, and difficulties with trust) presented significant challenges to establishing and sustaining their relationships with the young people they work with. However, they observed that those challenges made relational work essential, with the therapeutic relationship understood as the primary vehicle for change. Those who felt truly understood by their clinician were perceived to demonstrate greater capacity to engage and benefit from therapeutic work:

"[…]. She'll talk about feeling like she's understood. She'll know that we'll talk about those things […] care seeking through negative coping mechanisms […] She now trusts me to have those conversations […]relational things in our kind of work are important throughout." Dawn

The therapeutic relationship was described as uniquely close, sometimes uncomfortably so. Practitioners reflected the paramountcy of fostering a sense of safety in their relationship with young people with BPD while acknowledging the 'push-pull' pattern in help-seeking characteristic of BPD as a direct challenge to this. Formulating this within a developmental context in relation to attachment was evidently helpful for practitioners in navigating and maintaining relationships:

> *"as soon as you want to offer help they feel extremely unsafe and then they back off because they're really not adjusted to someone showing care and compassion to them […]there aren't other difficulties that can capture the relationship part* and the back and forth, the changes in the attachment base." Erin

2. A system not built for BPD

This theme captures participants' views about the services currently available to young people with BPD. There were recurring perceptions about diagnostic stigma and its contribution to professional diagnostic reticence.

2.1. "We don't know what to do with them": fragmented and disengaged services

Participants described a revolving door of engagement with community services in BPD, with the system viewing inconsistent engagement as patient fault rather than system unsuitability. There was a sense amongst participants that a BPD diagnosis did not necessarily guarantee access to treatment or a positive outcome. Therefore, the "*lack of a sense that there's a good pathway to put those people on"* contributed to reticence about diagnosing.

Practitioners acknowledged that services' current BPD support, though resource intensive, remains inadequate to meet the needs of this population, especially at a community level:

"I think this is a mental health problem that is causing problems. And we're struggling to treat it. And they've used all the community resources up. We need to ask for more help." George

Where specialist interventions for BPD existed, practitioners described frustration with fragmentary and inadequate delivery. Thus ensued a reluctance to engage with these evidence-based approaches at all. As currently delivered, these require young people to practise the most complex elements of intervention without the necessary foundations in place.

"there's lots of DBT skills […] you're asking them to do the cherry on top of something […] that's why I've not done DBT training because I get annoyed at how the NHS tries to deliver it." Helen

Positively, there were examples of clear understanding of existing BPD pathways to care in community teams, where BPD is discussed robustly and openly, in cohesion with wider services providing access to care. However, participants described inconsistencies across community services.

"Some CMHTs really get the hang of this and are really interested and have good team discussions about personality disorder […] in terms of diagnosis and thinking about where on the pathway that person might get help, and […] there's other sort of deserts where it doesn't feel like it's kind of taken hold at all". -Jean

2.2. Systemic Failure at Transitional Points

Many practitioners described difficulties at transitional points, especially when young people moved from CAMHS to AMHS. The lack of a shared language, and of service integration, frustrated practitioners. Diagnosis was viewed as fundamental to supporting transition and ensuring access to appropriate services in AMHS. Participants

also highlighted a problematic oppositional mentality between the services on either side of the transition:

> *"[…] the way transitions work between us and adult is bollocks, it's awful. Our language and their language are completely different things. We provide completely different things. […]there is also this assumption that adult does it right and CAMHS does it wrong that I feel is unhelpful. And I feel like we'd probably do better to learn from each other." Helen*

Participants identified no effective interface between mental health services and the wider system (including the third sector) and saw a need for more integrated support for the complex needs characteristic of BPD. Such integration was often undermined by the significant pressure facing services:

> *"I think the interfacing between services are unbelievably pathetic. Everyone's in their […] own little threat mode […] if you look at complex needs, you need a really close connection with the CMHT. You need to have that CPA system running so that everyone's involved" Rowan*

2.3. Pervasive stigma & exclusion

All practitioners described the negative perception of a BPD diagnosis across the health and social care system. While they acknowledged progress, it was clear that *"those attitudes are still there in pockets, whether they're spoken out loud or not".* A BPD diagnosis remains exclusionary in spaces and services designed to support young people. Practitioners described this stigma as systemic, contributing to their reticence about diagnosing. Their concerns were not about working with these young people or the diagnosis itself, but the wider system's reaction to the diagnosis:

> *"The first thing that comes into my consciousness is the system's going to be more difficult […] people will have certain views of the young person and will*

maybe be acting or reacting in certain ways that I think will then make it more difficult to work with the young person, not because of them, but because of what's going on around them." Jordan

Considering where this stigma is rooted, practitioners described looking inwards to their own professions and their role in perpetuating it. They attributed practitioner discomfort with BPD to internalised stigma and took ownership of that.

"I think sometimes it can come from that uncomfortableness of, well, people don't want the person to be stigmatised […] but then where did that come from? That literally came from our professions. So we created this problem" Patricia

Even where a BPD diagnosis is appropriate, participants described reticence stemming from the impact of stigma, being "discouraged from making such a clear diagnosis because of the longer consequences". They discussed the pervasive stigma individuals with BPD they had worked with had experienced - how "the treatment changes" when people became aware of their diagnosis.

3. Diagnostic controversy: divided perspectives on labelling young people

The diagnostic controversy attached to BPD, especially in young people, is well documented. This theme captures participants' perception of the utility of BPD diagnosis for young people. Diagnosis can be "*a really validating and important aspect"* that can help a young person understand themselves and facilitate access to care. Contrastingly, it also considers young people's experience of diagnostic stigma within the system, which may overshadow or inhibit care.

3.1. When diagnosis helps (understanding, access and validation)

Many participants identified positive aspects to diagnosis: it was key to developing young people's understanding of themselves, validating their experiences, and facilitating access to support and intervention.

> *"I've seen young people really respond really well to it and it helped them make sense of it and […]why they behave and why they think the way they do." Dawn*

Strengthening the case for evidence-based intervention, one practitioner reflected "*it's all about access to treatment in the end*". They recognised the potential of diagnosis to improve long term outcomes for young people and the value of early intervention. Notably, while acknowledging concerns about developmental appropriateness, participants reframed diagnosis as an opportunity to set young people on a more positive trajectory through self-understanding and transparency in care.

> *"I think early identification is important […] you can steer young […]I do acknowledge points about their personalities have not been developed yet, but we can for that reason […] steer them in a different path […]I have experience of a few young people who I think we genuinely did […] because it's helped that young person understand themselves and their care plan" Rachel*

3.2. When diagnosis harms (stigma, barriers, and iatrogenic risk)

Many participants raised the harmful consequences of diagnosis: labels could shape young people's experiences in services, risking internalisation of a stigmatised identity and undermining agency. Some also described iatrogenic harm, where diagnosis had the potential to worsen outcomes by influencing how young people were perceived and treated. Practitioners described a BPD label being used as a "tool for denial of care", leaving some young people excluded from services or facing reduced clinician optimism.

Discussing diagnosis, one participant explained:

"it does seem to not be well received by most services […]I think people get neglected sometimes because of the label […] They just say, 'oh, they've got borderline personality. So they're just like that. And there's nothing really we can do.' Although that that's probably not the case." George

Some participants described clinicians approaching individuals with a BPD diagnosis dismissively and reductively, using the diagnosis as a reason to avoid rather than engage therapeutically. They reflected on the injustice in how such assumptions influence young people's care from the outset, with inadequate assessment preventing access to appropriate intervention and perpetuating poor outcomes.

"That will inform your assessment that will inform your care […] it relates to that bit about how they're not really given a chance to be appropriately assessed. […]I do think that that is like very relevant. To how […] people with BPD experience their care, if clinicians already had those assumptions in the first place" Erin

Many practitioners reported colleagues lacking awareness of how their own behaviour detrimentally affected interactions with young people with BPD, with blame consistently attributed to the person with the diagnosis - a further mechanism by which services themselves sustain stigma:

"But then that just then gets put on to oh, it's because she's got BPD rather than people realising. Oh no, it's how I'm actually behaving towards this person." Patricia

3.3. Ambivalence and evolution in clinician views: "you need to be quiet about what you're doing"

This captures the complexity and tension within *practitioners'* attitudes toward diagnosing BPD in young people. No uniform response emerged; rather, perspectives were ambivalent, marked by uncertainty, and shaped by clinical experience. Some

described a shift in their own thinking over time, moving from reluctance, scepticism or even opposition toward a more open stance on diagnosis. This evolution, however, was heavily influenced by awareness of the controversy surrounding the diagnosis in young people. Some practitioners consequently worked in ways which were clinically justified and in the young person's best interests, but sometimes at odds with the views of their own professional group or the wider system.

A guardedness was evident in some accounts, speaking to a broader culture of unspoken practice, with clinicians navigating the gap between what they believe to be in the young person's best interests and what is professionally or institutionally sanctioned.

> *"There is a spread of opinion on it, I get that as well. Even particularly from within our own profession that can start to make it feel […] as if you need to be quiet about what you're doing."-Rachel*

Many practitioners described how contested the diagnosis had been over their careers and how this made them "*more anxious about giving a diagnosis".* They acknowledged the influence of colleagues at the early stages of their careers. The argument that BPD diagnosis is inappropriate in young people due to ongoing personality development was the dominant narrative to which many practitioners had been exposed to.

> *"I was very influenced by a colleague […] she was very vocal about not giving the diagnosis because personality was always evolving and changing right into our 20s and that she didn't feel that was helpful […] I was very influenced by that in the early part of my career" Sally*

However, some practitioners remained opposed to diagnosis, citing concerns about stigma, or the perceived limitations of diagnostic categories. Despite this reticence, practitioners still acknowledged the utility of diagnostic labels for self-understanding, but asserted this could also be provided through formulation, highlighting a view that formulation and diagnosis are incompatible.

"So I don't feel comfortable diagnosing BPD […] Though again, I'm also really aware of how it's like extremely valuable to some people, but then I don't see what would be wrong with like providing that in context of formulation" Erin

Discussion

This study examined professional attitudes and experience of identifying and/or treating complex needs characteristic of BPD features in young people. Three mutually reinforcing themes emerged: *Navigating Diagnostic Reticence; A System Not Built for BPD;* and *Diagnostic Controversy: Divided Perspectives on Labelling Young People.* Overall, these themes support wider evidence demonstrating poor identification of BPD in young people due to concerns of diagnostic stigma (Stiles et al., 2023) and controversy (Hartley et al., 2022), whilst furthering our understanding of the barriers and facilitators of earlier identification from the viewpoint of practitioners.

Navigating Diagnostic Reticence

The first theme, *Navigating Diagnostic Reticence,* suggested structural, epistemological, and stigma-related barriers to BPD diagnosis in young people.

The fact that community-based practitioners were notably less likely than those in specialised settings to identify or assess for BPD suggests a top-heavy model of provision. Identification depends on local expertise, professional confidence, service culture, and access to specialists, all underpinned by gaps in knowledge and persistent misconceptions about BPD in adolescence, as opposed to embedded routine practice (Papadopoullos et al., 2022; Kaess & Cavelti, 2025). The implications for equity of access are obvious: BPD is poorly identified at community level with missed opportunities for diagnosis and early intervention. This reticence is not limited to BPD - under-diagnosis of young people in UK CAMHS is a documented system-level pattern (Sayal et al., 2025) - but the consequences for BPD are particularly acute.

Practitioners remain reticent about BPD diagnosis, tied to stigma surrounding BPD within services, society and their own professions. Reticence also arises from a tension between diagnosis and formulation, especially for psychologically trained practitioners, who experienced formulation as safer and more collaborative. This characterisation of diagnosis as a 'feature of the medical model' is reductionist and potentially harmful, locating distress within the individual and carrying the weight of stigma (Hartley et al., 2022). While reflecting a genuine, longstanding epistemological tension within psychological practice, the present study's findings suggest it may serve as cover for diagnostic avoidance or delay. This aligns with wider literature demonstrating the iatrogenic harm, obscured need, and limited access to evidence-based treatment resulting from delayed diagnosis (Campbell et al., 2020; Stiles et al., 2023; Brandrett & Gajwani, 2026). This perpetuates missed diagnosis, polypharmacy and the protracted, complex pathways to care experienced by many people with BPD (McAllister, 2023).

A 'revolving door' of young people navigating services without their needs being met or identified is also discussed in wider literature (Klein et al., 2022). This study adds insight into how this barrier is understood by practitioners. Crucially, participants described inconsistent engagement as a core feature of BPD, attributed to the young person, rather than as a predictable response to an ill-suited system. This misattribution may itself be stigmatising, with direct consequences for care planning and delivery. Where disengagement is construed as manipulation or attention seeking (Street-Mattox et al., 2025), it becomes grounds for discharge or exclusion, in turn confirming the young person's expectation of rejection and deepening that disengagement (Collins et al., 2026). Reference to cohesive, continuous pathways which may break this cycle was exceptional and confined to specialist settings, compounding inequities (Klein et al., 2022).

A System Not Built for BPD

The second theme emerging in this study, *A System Not Built for BPD,* suggested structural and stigma-related failures that entrenched diagnostic reticence and produced a culture of unspoken practice.

The CAMHS-to-AMHS transition was identified as a particularly acute point of systemic failure by study participants. This is a long-held concern: the TRACK study (Islam et al., 2016) investigated transitions from CAMHS to AMHS, showing poorly managed transitions with a lack of a suitably integrated pathway particularly for young people with neurodivergence and personality pathology (Islam et al., 2016). Similarly, several participants in this study noted that young people who had been known to services for years may only receive their BPD diagnosis after transition to adult services, raising questions about the consequences of deferred identification during a critical developmental period (Chanen & McCutcheon, 2013).

Capacity and capability gaps emerged as compounding these structural problems. In addition, evidence-based treatments such as MBT and DBT were reported as being less available in community settings, which were viewed as fragmented, accessible to few and insufficient. A review by Jørgensen et al. (2021) found that specialist treatments such as MBT and DBT rarely outperformed generic treatment for adolescents with BPD. However, these explicitly limited findings are undermined by the fact that, even if generic care is a reasonable substitute, its delivery is hampered by the same structural barriers.

Clinical discomfort with a BPD diagnosis has been institutionalised into patterns of avoidance that persist across services (Klein et al., 2022; Stiles et al., 2023) and may be systematically embedded and resistant to change through evidence dissemination alone (Aviram et al, 2006; Laurenssen et al., 2013; Baker & Beazley, 2022).

Diagnostic Controversy: Divided Perspectives on Labelling Young People

The third theme, *Diagnostic Controversy: Divided Perspectives on Labelling Young People*, suggested a tension between diagnosis as validating and enabling, and diagnosis as stigmatising and harmful; a controversy practitioners did not merely observe but absorbed, impacting their confidence. Even practitioners who were resistant to formal diagnosis acknowledged its utility for self-understanding. Whilst diagnosis may reduce self-blame and provide access to services and a framework for self-understanding (Lester et al., 2020), the view more broadly on labelling young people with BPD remains a barrier.

The diagnostic controversy identified in this study is not merely a clinical or cultural artefact; it has a theoretical basis in developmental models of personality. Traditional models, following Erikson (1968), conceptualise personality as consolidating through adolescence and into early adulthood, with identity formation an ongoing developmental task: a view historically used to argue against diagnosing personality disorder during the developmental period of adolescence. More recently, developmental psychopathology accounts challenge this position: Chanen and Kaess (2012) and Sharp and Fonagy (2015) argue that BPD features are identifiable, stable, and clinically meaningful from early adolescence, and that withholding diagnosis on developmental grounds may itself delay access to effective early intervention. This theoretical tension mirrors precisely the ambivalence participants in this study described: an awareness that formal diagnosis in a young person sits uneasily against a developmental model of personality as still-forming, set against a clinical recognition that withholding diagnosis may leave need unmet. Participants' discomfort can therefore be understood as practitioners navigating a genuine, unresolved tension within the developmental psychopathology literature itself, as opposed to personal or cultural avoidance.

The controversy surrounding BPD diagnosis in young people reflects a genuine and unresolved tension in the field. Diagnosis can offer validation, access to services, and a coherent framework for understanding difficulties (Lester et al., 2020), while also carrying documented risks of stigma, iatrogenic harm, and premature labelling during a developmental period in which personality is still consolidating (Chanen & Kaess, 2012). This tension has prompted a wider shift within NHS mental health policy away from

categorical personality disorder diagnosis and toward the concept of 'complex emotional needs', introduced in the Community Mental Health Framework for Adults and Older Adults (NHS England, 2019). This aims to preserve access to relationally informed care while reducing the potentially stigmatising or premature application of a personality disorder label. The present findings suggest this terminological shift, while well intentioned, does not resolve the underlying tension identified in this study. Practitioners must still navigate if, and how, to name a young person's difficulties in a way that secures access to appropriate care without reproducing the harms associated with formal diagnosis. Rather than settling the diagnostic controversy, the complex emotional needs framework may simply relocate it.

The assumption that avoiding a categorical label protects young people from harm has itself been challenged in the literature. Hutsebaut at al. (2023) argue that delayed diagnosis, rather than diagnosis itself, is a key driver of BPD's long-term stigma and poor outcomes. Avoiding the label defers rather than prevents stigma while also delaying access to needs-matched care. They argue for a 'staged care' approach, in which treatment intensity is matched to a young person's actual clinical need from the outset. This is in contrast to the more common 'stepped-care' model in which young people must first move through lower-intensity treatment tiers before accessing specialist support.

This tension was reflected directly within the present sample. One participant expressed concern that relabelling BPD as 'complex emotional needs' risked simply displacing stigma onto a new term which would become "just as stigmatised" (Jean), rather than resolving it. Further, they described having established a lived-experience group within their service in which service users expressed a preference for retaining the term BPD and directing efforts toward improving the quality of care associated with that diagnosis, rather than renaming it. This perspective adds a service user informed dimension to the diagnostic controversy identified in this study, suggesting the relabeling debate is contested not only among practitioners but among those living with this label.

Clinician anxiety and feelings of inadequacy emerged from the interaction of diagnostic controversy, fragmented pathways, limited service support and the emotional intensity of relational work characteristic of BPD. Feelings of self-doubt and inadequacy were described as inherent to working with this population, and were reported across all levels of seniority and professional experience, also demonstrated by Baker & Beazley (2022). This universality (Bourke & Grenyer, 2013, 2017) suggests that difficulties reflect cultural factors within wider services, professional histories, pervasive stigma and systemic limitations, as opposed to knowledge or competency deficits (Ring & Lawn, 2025). Participants identified a potential iatrogenic risk whereby this discomfort results in reluctance to adopt the curious, open stance that thorough assessment requires, itself becoming a barrier to care. Unrecognised or unprocessed countertransference reactions - a distinctive feature of BPD work (Rossberg et al., 2007; Breivik Øvstebø et al., 2024) - have been identified as capable of adversely impacting clinical decision-making in precisely this way (Hayes et al., 2018). This emphasises the importance of psychologically-informed supervision and peer support: current guidance identifies supervision and team consultation as essential mechanisms for processing relational complexity, sustaining reflective functioning under pressure, and preventing countertransference from adversely affecting care (APA, 2024).

However, this relational intensity was more often experienced as a facilitator than a barrier. Many participants viewed the therapeutic relationship as the primary tool for safety, understanding and change, in line with the theoretical frameworks underpinning DBT and MBT (Linehan, 1993; Bateman & Fonagy, 2006). Relatedly, a recurring facilitator was how practitioners conceptualised BPD's characteristic 'push-pull' help-seeking pattern through a developmental attachment lens. Within a clinical formulation, this could inform rather than obstruct. Patterns often framed within services as 'non-engagement' may be better understood as expressions of attachment insecurity, relational ambivalence, fear of rejection, and previous negative experiences of care. This reframing was described as effective in promoting engagement within specialist CAMHS and AMHS; wider evidence shows that sustaining engagement, an active, fragile process, should be a therapeutic goal in working with adolescents with

BPD (Desrosiers et al., 2020). Yet this depends on continuity and consistency that fragmented services rarely provide, leaving a clear mismatch between the relational needs characteristic of BPD and the structures meant to meet them.

The recent shift from categorical to dimensional models of personality pathology offers one possible resolution to this tension. Both the Alternative DSM-V Model for Personality Disorder and ICD-11's PD classification now conceptualise personality difficulty on a severity continuum, alongside trait domains, rather than as a binary categorical diagnosis (Hutsebaut et al., 2026). This dimensional approach is argued to be more developmentally sensitive than categorical criteria, which are often behaviourally defined and best suited to presentations in young-to-middle adulthood (Videler et al., 2019). By contrast, growing evidence suggests personality functioning is rooted in developmental processes observable before puberty, and that related trait vulnerabilities can be identified even in childhood (Franssens et al., 2024; Hutsebaut et al., 2026). Framed this way, the participants' ambivalence need not be resolved by choosing between diagnosing or withholding a categorical BPD label; a dimensional approach would allow practitioners to describe and respond to a young person's level of impairment and specific traits without requiring the same binary diagnostic decision that appeared to underlie much of the discomfort described in this study.

Considered together, the three themes identified in this study are mutually reinforcing components of a complex system (Ellis et al., 2017). The diagnostic reticence described in Theme 1 is both a feature of individual practice and a characteristic of a wider system in which cultural stigma, insufficient care pathways, and inadequate training combine to legitimise diagnostic avoidance or delay (Klein et al., 2022; Papadopoullos et al., 2022; Stiles et al., 2023). The fragmentation described in Theme 2 actively sustains this reticence by removing the structural support required for more confident practice. This fragmentation is not limited to this study (Islam et al., 2016; Singh et al., 2023), creating a care gap between those who require services the most and those providing care. The diagnostic controversy detailed in Theme 3 underpins both. It illustrates a clinical culture which has been unable to consistently bridge the gap between the evidence base and

sanctioned practice, giving rise to unspoken practice and ambivalence. The implementation gap between research and practice continues to create delays in early identification and in the case of BPD, exacerbating poor outcomes. Across all three, this interconnection is reflected empirically in the recurrence of structural stigma as an explanatory frame: practitioners, services, and young people alike absorbing its consequences. The result is a system organised around avoidance of BPD in young people, with ethical implications of not identifying BPD earlier on (Hutsebaut et al., 2023). Addressing this requires a coordinated response: across professional culture, care pathway design, workforce development and supervision.

Strengths and Limitations

This study is the first to explore perspectives of community practitioners (primary care, CAMHS, AMHS, forensic, and third sector services) outside of specialist services, to understand practitioner views of BPD identification and treatment in young people. In-depth interviews provided rich accounts of practitioners' experiences, and reflexive thematic analysis, with its emphasis on researcher positionality and interpretive engagement, was well-suited to capturing the complexity and nuance of the data.
Findings sit alongside complementary strands of the BRIDGE project examining young people and family members' experiences of the same pathways, providing a more complete picture of the barriers and facilitators to their care.

These findings should be interpreted in light of limitations. Although the sample is professionally diverse, it remains weighted towards Clinical Psychology, and experienced practitioners in senior NHS roles. As such, the perspectives of less experienced practitioners, or those from backgrounds such as social work or youth justice, are underrepresented or uncaptured. The sample composition may also be systematically biased towards specialist perspectives and reflects practitioner accounts of young people's experiences.

A further limitation concerns this study's relationship to the wider BRIDGE project. Participants were recruited because they delivered services accessed by young people involved in BRIDGE, meaning the sample is likely to include practitioners already aware of and engaged with, the diagnostic and systemic issues this study explores. This raises the possibility of a self-selection bias, whereby practitioners with stronger views on BPD diagnosis and treatment in young people were more likely to participate, potentially amplifying certain perspectives. Findings should therefore be interpreted as illustrative of the range of practitioner perspectives within this network, rather than as representative of practitioner views more broadly.

Implications

These findings have direct implications for policy, service design, and workforce development. The variability in diagnostic practice and absence of consistent care pathways point to an urgent need for co-produced, evidence-based guidance on identifying and assessing BPD in young people. Investment in community and lower-tier CAMHS services is needed to address the top-heavy model of provision, with particular focus on the transition to AMHS and development of a shared clinical language across service boundaries. Within CAMHS, this could include establishing designated pathways or specialist posts for personality-pathology presentations in young people, rather than relying on ad hoc, individual clinician expertise; and joint working between CAMHS and AMHS could be strengthened through shared case conferencing, joint transition clinics, or dual trained liaison roles that bridge the two services during the transition period identified as a particular point of risk in this study.

Training that explicitly addresses stigma, builds diagnostic confidence, and supports differentiation of BPD from overlapping phenomenology is needed. At a public health level, anti-stigma initiatives targeting both professional and public understanding of BPD in young people could complement service level change, addressing the cultural avoidance identified across all three themes rather than treating it solely as an individual clinician training need. Reflective practice, supervision, and MDT consultation were

considered essential for psychological safety and sustainable practice and should be treated as a system requirement rather than an optional resource.

Conclusions

This study furthers the findings on the professional, cultural, and systemic barriers to identifying and treating BPD in young people across community and specialist services from the viewpoint of community practitioners working with young people. The three themes emerging in this study along with the wider literature collectively illustrate a complex system where cultural reticence, systemic fragmentation, and inadequate professional support converge to produce and sustain avoidance of BPD in young people. This results in missed opportunities for timely identification and intervention at a critical developmental stage, and with them the chance to redirect a trajectory of poor outcomes. These outcomes are not inevitable; they are addressable, and this study demonstrates the nature of the problem and the direction of the solution.

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Systematic Review

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Major Research Project

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Appendix 1.1: PRISMA 2020 Checklist

Section and Topic	Item #	Checklist item	Location where item is reported
TITLE			
Title	1	Identify the report as a systematic review.	10
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	11
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	12-14
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	14
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	15-16
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	15
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	Appendix 1.2
Selection process	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process.	16-17
Data collection process	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process.	17

Data items	10a	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	15-19
	10b	List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	15-19
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.	17
Effect measures	12	Specify for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results.	N/A

Section and Topic	Item #	Checklist item	Location where item is reported
Synthesis methods	13a	Describe the processes used to decide which studies were eligible for each synthesis (e.g. tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item #5)).	17-18
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	17-18
	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	17-18
	13d	Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used.	17-18
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).	17-18
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	17-18
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	17-18
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	N/A
RESULTS			
Study selection	16a	Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.	20-21

	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	N/A
Study characteristics	17	Cite each included study and present its characteristics.	22-24 , Appendix 1a
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	25-26
Results of individual studies	19	For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots.	27-33
Results of syntheses	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	27-33
	20b	Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (e.g. confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.	27-28
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	27-28
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	27-28
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	N/A
Section and Topic	**Item #**	**Checklist item**	**Location where item is reported**
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	N/A
DISCUSSION			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	34-41
	23b	Discuss any limitations of the evidence included in the review.	39-41
	23c	Discuss any limitations of the review processes used.	39-41
	23d	Discuss implications of the results for practice, policy, and future research.	38-41
OTHER INFORMATION			

Registration and protocol	24a	Provide registration information for the review, including register name and registration number, or state that the review was not registered.	14
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	14
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	N/A
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	N/A
Competing interests	26	Declare any competing interests of review authors.	N/A
Availability of data, code and other materials	27	Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.	N/A

From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systemati

Appendix 1.2: Search Terms Across Databases

APA PsycInfo <1806 to June 2026 Week 3> OVID	1 exp posttraumatic stress disorder/ (46503) 2 posttraumatic stress/ (3051) 3 PTSD.ti,ab,id. (47567) 4 acute stress disorder/ (724) 5 combat experience/ (3600) 6 acute stress disorder*.ti,ab, id. (1013) 7 (disorder$ adj2 extreme stress).ti,ab, id. (122) 8 ((posttrauma* or post trauma*) adj3 (stress* or neuros* or disorder* or psych* or symptom* or syndrome*) or PTSD).ti,ab, id. (66934) 9 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 (or/1-8) (70703) 10 exp attention deficit disorder with hyperactivity/ (34228) 11 ((attention* or behav*) adj3 (defic* or dysfunc* or disorder*)).ti,ab, id. (83101) 12 ((disrupt* adj3 disorder*) or (disrupt* adj3 behav*) or (defian* adj3 disorder*) or (defian* adj3 behav*)).ti,ab, id. (15581) 13 hyperkinesis/ (6065) 14 (hyperkin$ or hyper kin$).tw, id. (2426) 15 10 or 11 or 12 or 13 or 14 (102332) 16 exp Adolescent Development/ (79830) 17 (adoles* or ((Emerg* or young*) adj2 (adult* or person or person* or people)) or teen* or youth or juvenile or child*).ti,ab, id.(1187152)

	18 16 or 17 (1188258) 19 9 and 15 and 18 (823) 20 limit 19 to English language (772)

Embase <1974 to 2026 February 20> - OVID	1 exp Stress Disorders, Traumatic/ (103438) 2 Stress Disorders, PostTraumatic/ (102743) 3 PTSD.ti,ab,kf. (56668) 4 Stress Disorders, Traumatic, Acute/ (2153) 5(combat adj (stress* or neuros* or disorder* or syndrome*)).ti,ab,kw (767) 6 acute stress disorder*.ti,ab,kf. (1336) 7 (disorder$ adj2 extreme stress).ti,ab,kf. (70) 8 ((posttrauma* or post trauma*) adj3 (stress* or neuros* or disorder* or psych* or symptom* or syndrome*) or PTSD).ti,ab,kf. (86040) 9 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 (117695) 10 exp attention deficit hyperactivity disorder / (96569) 11 ((attention* or behav*) adj3 (defic* or dysfunc* or disorder*)).ti,ab,kw. (129214) 12 ((disrupt* adj3 disorder*) or (disrupt* adj3 behav*) or (defian* adj3 disorder*) or (defian* adj3 behav*)).ti,ab,kw. (17462) 13 hyperkinesis/ (7744) 14 (hyperkin$ or hyper kin$).tw,kf. (10019) 15 10 or 11 or 12 or 13 or 14 (194274) 16 exp Adolescent Development/ (5184) 17 (adoles* or ((Emerg* or young*) adj2 (adult* or person or person* or people)) or teen* or youth or juvenile or child*).ti,ab,kw (3341238)

	18 16 or 17 (3341572) 19 9 and 15 and 18 (2376) 20 limit 19 to English language (2307) .

Ovid MEDLINE(R) ALL <1946 to June 2026> - OVID	1 exp Stress Disorders, Traumatic/ (52526) 2 Stress Disorders, PostTraumatic/ (47569) 3 PTSD.ti,ab,kf. (41455) 4 Stress Disorders, Traumatic, Acute/ (598) 5 Combat Disorders/ (3268) 6 acute stress disorder*.ti,ab,kf. (953) 7 (disorder$ adj2 extreme stress).ti,ab,kf. (57) 8 ((posttrauma* or post trauma*) adj3 (stress* or neuros* or disorder* or psych* or symptom* or syndrome*) or PTSD).ti,ab,kf. (64349) 9 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 (78387) 10 exp attention deficit disorder with hyperactivity/ (38790) 11 ((attention* or behav*) adj3 (defic* or dysfunc* or disorder*)).ti,ab,kw. (91910) 12 ((disrupt* adj3 disorder*) or (disrupt* adj3 behav*) or (defian* adj3 disorder*) or (defian* adj3 behav*)).ti,ab,kw. 13259 13 hyperkinesis/ (4472) 14 (hyperkin$ or hyper kin$).tw,kf. (5856) 15 10 or 11 or 12 or 13 or 14 108261 (120068) 16 exp Adolescent Development/ (5739)

	17 (adoles* or ((Emerg* or young*) adj2 (adult* or person or person* or people)) or teen* or youth or juvenile or child*).ti,ab,kw (2384628) 18 16 or 17 (2385114) 19 9 and 15 and 18 (690) 20 limit 19 to English language (658) . 6

Appendix 1.3: CCAT Form and User Guide

Available at: https://conchra.com.au/2015/12/08/crowe-critical-appraisal-tool-v1-4/

Appendix 1.4: Study Table: Aims, Research Questions, and Findings.

Study	Aims	Research Questions	Findings
Baweja et al (2026)	To use a large real-world EHR dataset (TriNetX, >714,000 youth aged 6–18 with ADHD) to examine how comorbid PTSD affects prescribing patterns and clinical outcomes.	How does comorbid PTSD affect ADHD medication prescribing patterns and clinical outcomes in youth?	• 4.25% (30,341) had comorbid ADHD and PTSD, a group with higher comorbidity and service use than ADHD-only youth. • A PTSD diagnosis shifted prescribing away from CNS stimulants toward non-stimulants, antidepressants, antipsychotics and psychotherapy. • Despite this shift, stimulants were associated with the most favourable clinical outcomes (lower hospitalisation/ER risk) of any treatment class. • Medicated youth were paradoxically more likely to later receive a PTSD diagnosis, but stimulant use (vs. non-stimulants) lowered this risk. • Authors argue clinicians may be under-using stimulants after a PTSD diagnosis despite better outcomes, and call for RCTs.
Christoffersen & Thorup (2024)	To use nationwide Danish register data (birth cohorts 1984–1994, n=679,000) to test the "traumatic stress model" of PTSD, examining how family trauma, family disintegration, community violence and individual vulnerabilities predict	Do family trauma, family disintegration, community violence, and individual vulnerabilities predict first-time PTSD diagnosis in Danish schoolchildren?	• Lifetime PTSD prevalence was 2.3% (likely an underestimate, as diagnoses were hospital-based only). • Individual vulnerabilities were the strongest predictors: ADHD (OR=10.7) and autism (OR=7.1) massively increased risk. • Family/community trauma indicators (parental PTSD, violence, maltreatment, separation, adoption, victimisation) were significant but weaker (ORs 1.12–1.89); girls had higher risk than boys. • Counter to the model, parental substance abuse, unemployment, deprivation and non-Danish citizenship predicted lower diagnosed PTSD — likely under-diagnosis rather than true protection.

Study	Aims	Research Questions	Findings
	first-time PTSD diagnosis in school-age children.		• The model was broadly supported, but known risk factors explained only a modest share of PTSD risk.
Daud & Rydelius (2009)	To examine the overlap between ADHD and PTSD symptoms, and their relationship to IQ, in 80 refugee children in Sweden (40 with traumatised/tortured parents, 40 controls).	Do children of traumatized parents show ADHD and/or PTSD symptoms, and does low IQ predict having both together?	• 82% of children with traumatised parents had ADHD, PTSD, or both, vs. 10% of controls. • Most children diagnosed with ADHD also met PTSD criteria, suggesting overlap rather than true independent comorbidity. • Low IQ (<84) was strongly associated with having both diagnoses together; high IQ (>95) was protective. • Children of traumatised parents scored lower across WISC-III indices than controls. • Authors argue symptom overlap may lead clinicians to misdiagnose trauma-driven symptoms as ADHD.
Dixon et al (2005)	To describe trauma exposure and PTSD rates in female juvenile offenders, examine comorbidity patterns in those with vs. without PTSD, and identify factors associated with a PTSD diagnosis.	What is the PTSD rate among female juvenile offenders, and how does it relate to trauma history, comorbidity, attributional style, and family functioning?	• 37% had PTSD, overwhelmingly precipitated by sexual abuse (70%). • PTSD was linked to greater trauma exposure and significantly more psychiatric comorbidity, mostly emerging alongside or after PTSD onset. • 4+ psychiatric diagnoses and a history of sexual abuse were the strongest predictors of PTSD (52% of variance); trauma number, suicide attempts, family functioning and attributional style added nothing further.
Famularo et al (1996)	To compare psychiatric comorbidity between severely maltreated	Compared with other severely maltreated children, what psychiatric	• 35% (41/117) of severely maltreated children met full PTSD criteria. • The PTSD group had significantly higher rates of ADHD, anxiety disorders, brief psychotic symptoms and suicidal ideation.

Study	Aims	Research Questions	Findings
	children with PTSD (n=41) and similarly maltreated children without PTSD (n=76), isolating what is specific to PTSD itself.	diagnoses are specifically elevated in maltreated children who develop PTSD?	• PTSD showed no significant association with conduct disorder or ODD. • Males were overrepresented in the PTSD group, unlike the female-skewed pattern typical of PTSD in general population studies. • Authors conclude PTSD confers real additional diagnostic burden beyond symptom overlap, warranting careful differential diagnosis.
Ford et al (2000)	To examine, in child psychiatric outpatients, whether maltreatment specifically predicts ADHD and/or ODD, and whether maltreatment vs. accident/illness trauma differentially predicts PTSD symptom severity across ADHD, ODD, comorbid and control groups.	Is physical/sexual maltreatment specifically (not trauma generally) associated with ADHD and/or ODD, and does maltreatment vs. accident/illness trauma differentially predict PTSD symptom severity?	• Maltreatment exposure followed a gradient: highest in comorbid ADHD/ODD, then ODD-only, then ADHD-only, then controls. • All three clinical groups had significantly more PTSD symptoms than controls. • Maltreatment specifically predicted PTSD severity in the ADHD group; accident/illness trauma predicted it in the ODD group. • After removing PTSD/ADHD-ODD symptom overlap items, ADHD's hyperarousal link became indistinguishable from controls (an overlap artifact), while ODD's link remained genuine. • Authors recommend maltreatment screening for children with disruptive behaviour disorders generally.
Mpondo et al. (2026)	To audit clinical compliance with NICE ADHD guidelines at two public hospital neurodevelopmental clinics in the Eastern Cape, South Africa, and	How well do two Eastern Cape hospitals comply with NICE ADHD guidelines, and what comorbidities do their ADHD patients present with?	• Of 111 patients (86% male), 83% had a co-morbidity, most commonly cognitive impairment (41%), ASD (18%) and ODD (11%). • Compliance was good (>80%) on 8/16 audit standards, including diagnosis, first-line treatment and monitoring. • Compliance was poor (<50%) on 6 standards, including severity specification, parent groups and structured outcome monitoring.

Study	Aims	Research Questions	Findings
	describe the patient cohort's demographics and comorbidities.		• Core diagnostic/pharmacological care was strong, but psycho-social support and monitoring showed significant systemic gaps, attributed to resource constraints.
Seo et al. (2022)	To investigate the prevalence and psychiatric comorbidities of diagnosed ADHD in Korea among adults and children/adolescents, using nationwide health insurance data (2008–2018).	How has ADHD prevalence changed in Korea (2008–2018), and how does comorbidity differ between adult and child/adolescent ADHD patients?	• Diagnosed ADHD prevalence rose from 127.1 to 192.9/100,000 (2008–2018) — a 1.47-fold rise in children/adolescents vs. a 10.1-fold rise in adults. • Prevalence was higher in males, though the rate of increase was steeper in females. • Psychiatric comorbidity was markedly higher in adults (78.72%) than children/adolescents (61.84%); adults had higher odds of most psychiatric comorbidities but lower odds of neurodevelopmental comorbidities.
Smalley et al. (2007)	To estimate ADHD prevalence and psychiatric comorbidity among adolescents in the Northern Finland Birth Cohort 1986 (n=9,432), using SWAN screening plus K-SADS-PL clinical interviews.	What is the prevalence of ADHD and its psychiatric comorbidity in a stimulant-naïve Finnish adolescent population?	• ADHD prevalence was 6.7–8.5% (strict definition), rising to 18.2% under a broad lifetime definition; male:female ORs of 3.2–6.1. • The inattentive subtype predominated (64%). • ADHD was strongly associated with anxiety, mood and especially disruptive behaviour disorders. • Most strikingly, ADHD was associated with a 22.6-fold increased odds of comorbid PTSD (wide confidence intervals given small case numbers). • This stimulant-naïve cohort allowed observation of ADHD's "natural" comorbidity course, which closely mirrored patterns seen in other countries.
Smith et al (2026)	To examine, for the first time, how cognitive disengagement syndrome	How is cognitive disengagement syndrome associated with individual,	• Among 50 participants, 100% reported trauma exposure; 20% met PTSD criteria and 14% met DTD criteria.

Study	Aims	Research Questions	Findings
	(CDS) relates to trauma at individual, community and systemic levels among Black and/or Latiné adolescents with ADHD.	community, and systemic-level trauma in Black/Latiné youth with ADHD?	• CDS was associated with ADHD inattention, perceived stress (strongest association), discrimination, COVID-19 stressors and PTSD, strongest at the individual level. • Community violence and immigration trauma showed no association with CDS (low exposure in the sample). • DTD's affect-dysregulation and physiological subscales were positively linked to CDS; the attachment subscale was unexpectedly negatively linked. • Authors suggest CDS may be an adaptive disengagement response to trauma and call for multi-level, culturally-responsive assessment.
Ünver & Karakaya (2019)	To examine ADHD comorbidity in children/adolescents with PTSD (n=68), using patients with OCD (n=42) as a comparison, testing whether ADHD would be more prevalent in PTSD.	Is ADHD more common among children with PTSD than among children with OCD?	• 22.05% of the PTSD group met ADHD criteria vs. 59.52% of the OCD group — the opposite of the hypothesis, though not statistically significant. • The PTSD group was predominantly female (88%) and mostly trauma-exposed via sexual abuse, flagged as a possible confound. • No significant ADHD–PTSD relationship was found, contrasting with adult studies showing a stronger association. • The 22% ADHD rate in the PTSD group was still above general Turkish population prevalence (~8–13%).

Appendix 2.1: COREQ

Consolidated criteria for reporting qualitative studies (COREQ): 32-item checklist

Developed from:
Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*. 2007. Volume 19, Number 6: pp. 349 – 357

MANUSCRIPT TITLE:

No. Item	Guide questions/description	Reported on Page #
Domain 1: Research team and reflexivity		
Personal Characteristics		
1. Inter viewer/facilitator	Which author/s conducted the interview or focus group?	Pg 55
2. Credentials	What were the researcher's credentials? (E.g. PhD, MD)	Pg 55
3. Occupation	What was their occupation at the time of the study?	Appendix 2.8
4. Gender	Was the researcher male or female?	Appendix 2.8
5. Experience and training	What experience or training did the researcher have?	Appendix 2.8
Relationship with participants		Appendix 2.8
6. Relationship established	*Was a relationship established prior to study commencement?* .	Appendix 2.8
7. Participant knowledge of the interviewer	*What did the participants know about the researcher? (e.g. personal goals, reasons for doing the research).*	Appendix 2.8
8. Interviewer characteristics	*What characteristics were reported about the interviewer/facilitator? (e.g. Bias, assumptions, reasons and interests in the research topic)*	Appendix 2.8

Domain 2: Study design		
Theoretical framework		
9. Methodological orientation and Theory	*What methodological orientation was stated to underpin the study? (e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis).*	Pg 55

Participant selection		
10. Sampling	*How were participants selected? (e.g. purposive, convenience, consecutive, snowball)*	Pg 55
11. Method of approach	*How were participants approached? (e.g. facetoface, telephone, mail, email)*	Pg 55
12. Sample size	*How many participants were in the study?*	Pg 56
13. Non-participation	*How many people refused to participate or dropped out? Reasons?*	Pg 56
Setting		
14. Setting of data collection	*Where was the data collected? (e.g. home, clinic, workplace)*	Pg 56
15. Presence of nonparticipants	*Was anyone else present besides the participants and researchers?*	NA
16. Description of sample	*What are the important characteristics of the sample? (e.g. demographic data, date)*	Pg 56
Data collection		
17. Interview guide	*Were questions, prompts, guides provided by the authors? Was it pilot tested?*	Pg 55 Appendix 2.4
18. Repeat interviews	*Were repeat interviews carried out? If yes, how many?*	NA
19. Audio/visual recording	*Did the research use audio or visual recording to collect the data?*	Pg 55

20. Field notes	*Were field notes made during and/or after the interview or focus group?*	NA
21. Duration	*What was the duration of the inter views or focus group?*	Pg 55
22. Data saturation	Was data saturation discussed?	Pg 56
23. Transcripts returned	*Were transcripts returned to participants for comment and/or correction?*	NA
Domain 3: analysis and findings		
Data analysis		
24. Number of data coders	How many data coders coded the data?	Pg 57
25. Description of the coding tree	*Did authors provide a description of the coding tree?*	Appendix 2.9
26. Derivation of themes	*Were themes identified in advance or derived from the data?*	Pg 56
27. Software	*What software, if applicable, was used to manage the data?*	Pg 56
28. Participant checking	*Did participants provide feedback on the findings?*	NA
Reporting		
29. Quotations presented	*Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? (e.g. participant number)*	Pg 59-70
30. Data and findings consistent	*Was there consistency between the data presented and the findings?*	Pg 59-71
31. Clarity of major themes	*Were major themes clearly presented in the findings?*	Pg 59-71
32. Clarity of minor themes	Is there a description of diverse cases or discussion of minor themes?	Pg 59-71

Appendix 2.2: Final Approved Proposal

Available at: https://osf.io/5w6kt/files/etgva

Appendix 2.3: Ethical Approval Letter

NHS
Health Research Authority

North West - Haydock Research Ethics Committee
2 Redman Place
Stratford
London
E20 1JQ

26 August 2025

Dear Ms Ner

Study title:	**The BRIDGE project: A feasibility randomised controlled trial of brief, intensive assessment and integrated formulation for young people (age 14-24) early in the course of borderline personality disorder.**
REC reference:	**21/NW/0209**
Amendment number:	**SA_13**
Amendment date:	**10 July 2025**
IRAS project ID:	**299825**

The above amendment was reviewed by the Sub-Committee in correspondence.

Ethical opinion

The members of the Committee taking part in the review gave a favourable ethical opinion of the amendment on the basis described in the notice of amendment form and supporting documentation.

Approved documents

The documents reviewed and approved at the meeting were:

Document	*Version*	*Date*
Completed Amendment Tool [SA_13 Amendment Tool]	V1.8	10 July 2025
Covering letter on headed paper [REC Cover Letter SA_13]	V1.0	25 July 2025
Letters of invitation to participant [Invitation Letter]	V1.0	20 July 2025
Other [Interview Schedule V1.1_15.08.25]	1.1	15 August 2025
Participant consent form [Consent form V1.2_15.08.25]	1.2	15 August 2025
Participant information sheet (PIS) [PIS V1.2_15.08.25]	1.2	15 August 2025

Membership of the Committee

The members of the Committee who took part in the review are listed on the attached sheet.

Working with NHS Care Organisations

Sponsors should ensure that they notify the R&D office for the relevant NHS care organisation of this amendment in line with the terms detailed in the categorisation email issued by the lead nation for the study.

Amendments related to COVID-19

We will update your research summary for the above study on the research summaries section of our website. During this public health emergency, it is vital that everyone can promptly identify all relevant research related to COVID-19 that is taking place globally. If you have not already done so, please register your study on a public registry as soon as possible and provide the HRA with the registration detail, which will be posted alongside other information relating to your project.

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

HRA Learning

We are pleased to welcome researchers and research staff to our HRA Learning Events and online learning opportunities– see details at: https://www.hra.nhs.uk/planning-and-improving-research/learning/

IRAS Project ID - 299825:	**Please quote this number on all correspondence**

Yours sincerely

Prof Paul Eldridge
Vice-Chair

E-mail: haydock.rec@hra.nhs.uk

Enclosures: *List of names and professions of members who took part in the review*

Copy to: *Dr Ruchika Gajwani, University of Glasgow*

Appendix 2.4: Interview Schedule

Available at: **https://osf.io/5w6kt/files/qjudn**

Available at:

Appendix 2.5: Letter of Invitation

https://osf.io/5w6kt/files/ys7e2

Available at:

Appendix 2.6: Participant Information Sheet

Available at: https://osf.io/5w6kt/files/y5rtk

Available at:

Appendix 2.7: Consent Form

https://osf.io/5w6kt/files/cvr5d

Available at:

Appendix 2.8: Researcher Reflexivity Statement

I am a white, female trainee clinical psychologist with no personal experience of complex mental health difficulties. However, in my professional roles I have consistently observed how individuals with this diagnosis have been stigmatised and marginalised by a system which should care for them. Even in discussing my research with psychology colleagues I have noticed the discomfort discussing this diagnosis evokes, particularly in relation to young people. Although the value and importance of early intervention is widely recognised across psychological disorders, this does not seem to consistently apply to BPD and I sought to understand why that is. As a trainee clinical psychologist aligned to a clinical health psychology specialism, I have spent much of my training working in medicalised settings alongside the medical model. I have developed an appreciation for the utility of diagnoses as they have, at times, acted as a shared language with my medical colleagues. Discussing diagnostic labels in this context has often also given me the opportunity to share aspects of my psychological formulation with colleagues, to the benefit of the people we care for. As such I have come to realise I feel relatively at ease with diagnostic labels, viewing diagnosis and formulation as complementary, not incompatible, approaches.

I am aware that I am interviewing practitioners from services I have no personal experience of working in, and that my experience of working with young people with BPD features is limited. Therefore, I feel as though I am approaching practitioners who are participating in this study as a bit of an outsider but from within the same or similar profession. I have noted a difference in how I feel approaching this research as a Trainee Clinical Psychologist, versus how I approached research with the similar methodologies in my previous role as a research assistant. I don't feel as removed from participant experience as a Trainee Clinical Psychologist as I did as a Research Assistant. To support reflexivity, I maintained a reflective journal throughout the research process and engaged in regular supervision. This supported critical awareness of how my assumptions, experiences, thoughts, and feelings may have shaped data collection and analysis. During the analytical phase, coding and theme development were grounded in participants' own words to minimise interpretive imposition.

Available at:

Appendix 2.9: Example of Theme Development

https://osf.io/5w6kt/files/7wrdc

Available at:

Appendix 2.10: Data Availability Statement

All anonymised data from this study, will be safely deposited in a repository within a year of study completion. In the meantime, please contact the corresponding author for any queries about the data used in this study.

Available at:

Appendix 2.11: Data Analysis Plan

https://osf.io/5w6kt/files/epnjk

Available at:

Appendix 2.12: Detailed Record of Data Analysis

Available at: https://osf.io/5w6kt/files/hvk7y